

Exhibit 3

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Version

CLEMENT SETH ROBERTS (STATE BAR NO. 209203)

croberts@orrick.com

BAS DE BLANK (STATE BAR NO. 191487)

basdeblank@orrick.com

ALYSSA CARIDIS (STATE BAR NO. 260103)

acaridis@orrick.com

EVAN D. BREWER (STATE BAR NO. 304411)

ebrewer@orrick.com

ORRICK, HERRINGTON & SUTCLIFFE LLP

The Orrick Building

405 Howard Street

San Francisco, CA 94105-2669

Telephone: +1 415 773 5700

Facsimile: +1 415 773 5759

SEAN M. SULLIVAN (*pro hac vice*)

sullivan@ls3ip.com

COLE RICHTER (*pro hac vice*)

richter@ls3ip.com

LEE SULLIVAN SHEA & SMITH LLP

656 W Randolph St., Floor 5W

Chicago, IL 60661

Telephone: +1 312 754 0002

Facsimile: +1 312 754 0003

Attorneys for Defendant Sonos, Inc.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

GOOGLE LLC,

Plaintiff and Counter-defendant,

v.

SONOS, INC.,

Defendant and Counter-claimant.

Case No. 3:20-cv-06754-WHA

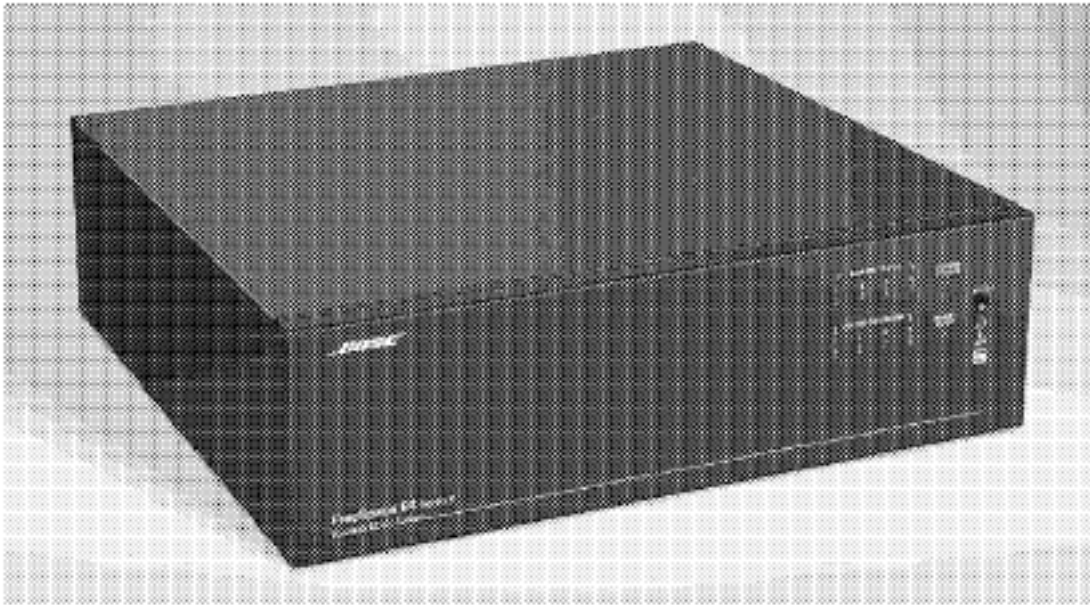
Related to Case No. 3:21-cv-07559-WHA

**REBUTTAL EXPERT REPORT OF
DR. KEVIN C. ALMEROOTH FOR
“PATENT SHOWDOWN”**

1 DIN adapter” must be used to connect a Bose link expansion product like an SA-2 or SA-3
2 amplifier to the multi-room interface of the Bose Lifestyle 50 System using a Bose link cable. In
3 my opinion, when the “8-to-9-pin DIN adapter” is used to connect an SA-2 or SA-3 amplifier to
4 the multi-room interface the SA-2 or SA-3 amplifier would not be able to communicate with the
5 multi-room interface using the Bose link communication protocol. Instead, the SA-2 or SA-3
6 amplifier would operate like the Acoustimass module of the Bose Lifestyle 50 System. Notably,
7 I have not seen any evidence that the multi-room interface of the Bose Lifestyle 50 System could
8 be updated to operate in accordance the Bose link communication protocol.

9 Bose FreeSpace E4 Series II Business Music System

10 246. According to the “Bose FreeSpace E4 Series II Business Music System Owner’s
11 Guide” (“Bose Freespace Owner’s Guide”) dated July 10, 2004, Bose FreeSpace “is an
12 integrated four channel digital signal processor and 400-watt power amplifier for 70/1 DOV
13 business music applications” that “provides all of the processing and control features required for
14 one-to-four zone business music applications” in a “single chassis.” BOSE_SUB-0000062-136
15 at 74. The Bose FreeSpace “allow[s] for an input source to be routed to any of the four amplifier
16 outputs,” which allows for audio distribution for up to four different zones. *Id.* As shown and
17 described in the Owner’s Guide, “[s]peaker systems in up to four zones can be connected to the
18 ZONE OUT amplifier outputs” using “the speaker cable from each zone.” *Id.* at 93. A picture
19 of the Bose FreeSpace E4 product is shown below:
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Id. at 74.

247. Based on this disclosure, it is my opinion that a system comprising the Bose FreeSpace product connected to different passive speakers systems in different zones via speaker cable is a conventional centralized, hard-wired audio system such as that described in the Background section of the '885 Patent, where audio from audio sources connected to the centralized Bose FreeSpace product is distributed to connected speaker systems. *See* '885 Patent at 1:46-2:16. A POSITA would not consider the centralized Bose FreeSpace product and connected speaker systems to be operating on a data network because the hard-wired connection described in the Bose FreeSpace Owner's Guide is not a medium that interconnects devices, enabling them to send digital data packets to and receive digital data packets from each other. Moreover, as explained below, passive speakers like the ones utilized with the centralized Bose FreeSpace product are not "zone players," as required by claim 1 of the '885 Patent, because they are not data network devices and are not configured to process and output audio.

248. Given that there are no "zone players" in a Bose FreeSpace system, there can be no "zone scenes." Not surprisingly, Dr. Schonfeld does not cite to the Bose FreeSpace system for any of his invalidity analysis other than the processor and network interface limitations.

249. The Bose FreeSpace Owner's Guide also explains that a user can use the "Set Up

Schedule mode” on the “FreeSpace Installer Software” to “automate a system by creating up to 64 events.” *See* BOSE_SUB-0000062-136 at 101. Events can be set up for each of the four individual zones on the Bose FreeSpace product and can include events such as “On/Off, Mute, Volume, Source, and Audio Volume.” *Id.* Such events “are only saved to the E4 unit” itself and there is no disclosure that information about the events is transmitted to any other device such as a speaker system in a zone to which the event pertains. In other words, events are merely set up on the Bose FreeSpace product and not communicated with any other device, and then audio is distributed from the centralized Bose FreeSpace product to connected speaker systems in accordance with the events. Moreover, there is no disclosure of anything other than audio being transmitted from the centralized Bose FreeSpace product to the connected speaker systems.

250. Notably, there is no disclosure in the Bose Freespace Owner’s Guide or any of the other Bose FreeSpace materials cited by Dr. Schonfeld teaching or suggesting that the Bose FreeSpace system is related to or somehow compatible with the Bose Lifestyle 50 System. To the contrary, based on the materials I have reviewed, it is my opinion that the Bose FreeSpace product and the Bose Lifestyle 50 System are not related or compatible. Instead, the systems are alternatives for distributing audio from a central location to one or more rooms or zones via an audio cable, albeit with very different capabilities.

E. Millington

251. I understand that Millington was published on February 10, 2005. Dr. Schonfeld provides a brief overview of Millington in his report. *See* Schonfeld Op. Report at ¶¶ 164-169.

252. At a high-level, Millington discloses a “network audio system” that includes “zone players,” which are data network devices that are configured to process and output audio. Millington at 3b, FIGs. 1-3. According to Millington, each of these “zone players” is capable of operating in a standalone mode in which the “zone player” is configured for individual audio playback, and each of these “zone players” is also capable of being added to a “synchrony group” comprising a set of “zone players” that are configured to “play the same audio program synchronously” by coordinating with one another over a data network. *Id.* at 6-11; *see also id.* at 13-48.

280. As a further example, Dr. Schonfeld asserts that “[t]he capabilities and features of the Sonos System are apparent from ... the [Sonos] products themselves,” which were made available for inspection. *See* Schonfeld Op. Report at ¶¶ 107, 183. In this regard, Dr. Schonfeld appears to be suggesting that he tested physical Sonos products. However, to the extent Dr. Schonfeld did perform any testing of physical Sonos products, he did not provide any analysis or information regarding such testing in his Opening Report. Regardless, Dr. Schonfeld has not established that these physical Sonos products were publicly available prior to the September 12, 2005 critical date, the December 21, 2005 invention date, or the September 12, 2006 priority date of the ’885 Patent. Likewise, Dr. Schonfeld has not established that these physical Sonos products were loaded with prior art firmware. Thus, to the extent Dr. Schonfeld tested these physical Sonos products, he has not established that the functionality he observed accurately reflects how the Sonos System actually functioned at a time that would qualify as prior art.

2. Sonos’s 2005 System Did Not Have “Zone Scenes” Functionality

281. Claim 1 of the ’885 Patent requires a “first zone player” that is programmed with the capability to be added to two different “zone scenes” and then later operate in accordance with a selected one of the two different “zone scenes.”

282. As explained in the ’885 Patent, this “zone scenes” capability provided a new way for a user to group “zone players” together for synchronous playback in a networked multi-zone audio system, which was intended to improve upon certain drawbacks with both the existing process for grouping players in “conventional multi-zone audio systems” as well the existing process for grouping “zone players” together for synchronous playback that was being practiced by Sonos’s own commercial system at the time of the invention of the ’885 Patent in 2005. *See* ’885 Patent at 1:30-2:24, 8:30-45; *see also* Case No. 20-6754, D.I. 309 at 3-5, 12.

283. In particular, the ’885 Patent starts by explaining there were various limitations and problems with “conventional multi-zone audio system[s]” comprising traditional audio players that were connected by speaker wire to a “centralized” A/V receiver, including difficulties in grouping different audio players together at different times. *See* ’885 Patent at 1:46-2:23. For instance, as explained in the ’885 Patent:

1 In order to achieve playing different audio sources in different audio players, the
2 traditional multi-zone audio system is generally either hard-wired or controlled by
3 a pre-configured and pre-programmed controller. While the pre-programmed
4 configuration may be satisfactory in one situation, it may not be suitable for another
5 situation. For example, a person would like to listen to broadcast news from his/her
6 favorite radio station in a bedroom, a bathroom and a den while preparing to go to
7 work in the morning. The same person may wish to listen in the den and the living
8 room to music from a compact disc in the evening. In order to satisfy such
9 requirements, two groups of audio players must be established. In the morning, the
10 audio players in the bedroom, the bathroom and the den need to be grouped for the
11 broadcast news. In the evening, the audio players in the den and the living room are
12 grouped for the music. Over the weekend, the audio players in the den, the living
13 room, and a kitchen are grouped for party music. Because the morning group, the
14 evening group and the weekend group contain the den, it can be difficult for the
15 traditional system to accommodate the requirement of dynamically managing the
16 ad hoc creation and deletion of groups.

17 There is a need for dynamic control of the audio players as a group. With a
18 minimum manipulation, the audio players may be readily grouped. In a traditional
19 multi-zone audio system, the audio players have to be adjusted one at a time,
20 resulting in an inconvenient and non-homogenous audio environment.

21 '885 Patent at 1:62-2:23.

22 284. After introducing the limitations of “conventional multi-zone audio system[s],” the
23 '885 Patent describes a new type of *networked* multi-zone audio system comprised of data network
24 devices that are configured to process and output audio, referred to as “zone players.” *Id.* at FIG.
25 1, 4:49-6:27. Unlike the audio players in “conventional multi-zone audio system[s],” these “zone
26 players” have processors and memory, and are capable of communicating with other data network
27 devices, such as “controlling devices,” “audio sources,” and other “zone players,” over a data
28 network. *Id.* These distinctions alone improved upon “conventional multi-zone audio system[s]”
comprised of “audio players” that were connected by speaker wire to a centralized A/V receiver
and did not have the capability to communicate over a data network or process digital data, which
made such systems “inflexible,” “difficult” to use, and “not [] suitable” for many users. *See* '885
Patent at 1:46-2:16.

29 285. I understand that this description of the networked multi-zone audio system in the
30 '885 Patent was based on Sonos's own networked multi-zone audio system, which Sonos began
31 working on in 2002 and commercially released in January 2005 under the name “The Sonos Digital

1 Music System.” *See, e.g.,* <https://www.sonos.com/en-us/how-it-started>; Millington Dep. Tr. at
2 113:14-20. In Sonos’s networked multi-zone audio system that was released in January 2005, the
3 “zone players” were called “ZonePlayers” (model number “ZP100”), and there were two types of
4 “controlling devices” that could be used with the ZonePlayers – a computer installed with Sonos’s
5 “Desktop Controller” software or a dedicated “Sonos Controller” handheld device (model number
6 “CR100”). Sonos’s networked multi-zone audio system that was released in January 2005
7 provided a new paradigm that advanced over the “conventional multi-zone audio system[s]”
8 described in the ’885 Patent.

9 286. Each of the “zone players” in the networked multi-zone audio system described in
10 the ’885 Patent (and in Sonos’s own system at the time) was capable of playing back audio
11 individually (*i.e.,* on its own). *See, e.g.,* ’885 Patent at 4:44-5:2, 5:21-6:27, 6:39-43. In addition,
12 each of the “zone players” in the networked multi-zone audio system described in the ’885 Patent
13 (and in Sonos’s own system at the time) was capable of being grouped together with one or more
14 other “zone players” so that the grouped “zone players” become configured for synchronous
15 playback. *Id.* at 5:16-20, 5:57-6:7, 6:43-48, 7:35-41, 7:58-9:30, 10:4-11:20. In this respect, each
16 such “zone player” operated in one of two states at any given time: (i) a first state in which the
17 “zone player” is not actively grouped with any other “zone player” but rather is configured to play
18 back audio individually (*i.e.,* a non-grouped or standalone mode), whether or not the “zone player”
19 is engaging in active playback, or (ii) a second state in which the “zone player” is actively grouped
20 with one or more other “zone players” such that it is configured for synchronous playback as part
21 of that group (*i.e.,* a grouped mode), whether or not the group is engaging in active playback. *Id.*

22 287. The ’885 Patent goes on to explain that in a networked multi-zone audio system
23 like the one described in the ’885 Patent, one process for grouping “zone players” together for
24 synchronous playback involved a user selecting a particular set of “zone players” to group together
25 in an ad-hoc manner, one-by-one, when the user wishes to listen to audio across the set of “zone
26 players,” which would then create a temporary, ad-hoc group that was automatically activated for
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1 synchronous group at the time of creation. '885 Patent at 8:30-44; '407 Provisional⁸, at App'x A,
2 1. The '885 Patent also notes that this ad-hoc grouping process was being utilized by Sonos's own
3 networked multi-zone audio system at the time. See '885 Patent at 8:42-44 (referring to this ad-
4 hoc grouping process as the "current mechanism"); '407 Provisional, at App'x A, 1 (explaining
5 that "[c]urrently in the Sonos UI, zone groups are created by manually linking zones one at a time
6 until the desired zone grouping is reached"). However, the '885 Patent notes that this ad-hoc
7 grouping approach "may sometimes be quite time consuming," because each time the user wishes
8 to activate a different group for synchronous playback, the user has to repeat the process of
9 selecting each of the "zone players" to include in the group even if it is a grouping of "zone players"
10 that had previously been created by the user on many other occasions in the past. '885 Patent at
11 8:42-45, 54-56. This was a byproduct of the fact that a group of "zone players" created using the
12 ad-hoc process was temporary – it only existed during the limited time that the group was activated
13 for playback, and as soon as a user wanted to use a "zone player" in an existing group for individual
14 playback or wanted to create a new group that included one or more of the "zone players" in the
15 existing group, the existing group would need to be destroyed. Thus, the only way a user could
16 use a group having that same group membership again in the future was by re-creating a new
17 temporary group that included the same members as the previously-existing group.

18 288. In view of these drawbacks with the existing ad-hoc grouping process, the '885
19 Patent disclosed a new process for grouping "zone players" together for synchronous playback in
20 a networked multi-zone audio system using a "zone scene," which is described as a "predefined"
21 group of "zone players" that is first pre-configured by a user and is then made available to be
22 selected for invocation in the future so that a user can later activate the group for synchronous
23 playback on demand. *Id.* at 8:45-9:30, 10:4-11:20, FIGs. 5A-B, 6; *see also* '407 Provisional at
24 App'x A; Case No. 20-6754, D.I. 309 at 4 (the Court finding that "the '885 Patent allows a user to
25 customize and save multiple groups of smart speakers or other players . . . and then later 'activate
26 a customized group, called a 'zone scene,' on demand), 8 (the Court noting that the "basic purpose

27 ⁸ As I explained in my Opening Report, the '407 Provisional is incorporated by reference into the '885
28 Patent.

1 of the invention . . . is to allow users to pre-save customized speaker groups and later ‘invoke’ the
2 named group on demand”). This new grouping process enables a user to activate a user-created
3 group of “zone players” for synchronous playback in a more seamless manner, because instead of
4 having to select each “zone player” to include in the group in a “time consuming” ad-hoc manner
5 at the time that the user wishes to activate the group, the user can simply select a previously-saved
6 “zone scene” comprising a predefined version of the group.

7 289. As disclosed in the ‘885 Patent, grouping “zone players” using a “zone scene”
8 involves two separate and distinct phases. During a first “setup” phase, a user can use a controller
9 device to create and save a new “zone scene” for future use, which involves adding the particular
10 “zone players” to be included as members of a predefined group and also assigning a name to the
11 “zone scene,” but the predefined group of “zone players” is not activated for synchronous playback
12 at this time. *See, e.g.,* ‘885 Patent at 8:45-51, 10:4-19, 10:36-52, 11:12-19; ‘407 Provisional at
13 App’x A, 1-2, 9-16. Rather, the group of “zone players” that is predefined and saved at a user’s
14 request as part of the “zone scene” initially exists in an inactive state. Thereafter, during a second
15 “invocation” phase, a user can use a controller device to “invoke” a previously-created and saved
16 “zone scene,” which is what causes the predefined group of “zone players” to become activated
17 for synchronous playback. *See, e.g.,* ‘885 Patent at 9:16-20, 10:53-63, 11:12-19, ‘407 Provisional
18 at App’x A, 1-8. In other words, it is this later, post-creation act of “invoking” the previously-
19 saved “zone scene” that causes each “zone player” in the predefined and pre-saved group to
20 configure itself to play back audio in synchrony with the other member(s) of the predefined and
21 pre-saved group – prior to that time, a “zone player” may receive an indication that it is a member
22 of the previously-created “zone scene” that facilitates the saving of the previously-created “zone
23 scene,” but the “zone player” will not automatically configure itself to play back audio in
24 synchrony with the other member(s) of the predefined group.

25 290. This two-phase process for grouping “zone players” whereby a user-created group
26 is able to exist in an inactive state so that it can later be invoked is distinct from the user-created
27 groups that could be created using prior art grouping processes discussed in the ‘885 Patent, which
28 involved only a single phase during which a group was automatically activated at the same time

1 that the group was created and then only existed for the limited period of time during which the
2 group was activated. Relatedly, there are several other key distinctions between the “zone scene”
3 technology that is described and claimed the ’885 Patent and the prior art grouping technology
4 described in the ’885 Patent.

5 291. First, because the user-created group that is predefined and pre-saved as part of a
6 “zone scene” typically starts out in an inactive state and does not become activated until the “zone
7 scene” is later invoked at a user’s request, the act of creating a new “zone scene” does not cause a
8 “zone player” that has been added to the “zone scene” to automatically change its current operating
9 mode for audio playback. Instead, the “zone player” will continue to operate in the same mode
10 for audio playback that it was operating in prior to the creation of the new “zone scene.” For
11 instance, if a “zone player” is operating in a mode for individual playback of audio when it receives
12 an indication that it has been added to a new user-created “zone scene” comprising a predefined
13 group of “zone players” for synchronous playback, the “zone player” will continue to operate in
14 the mode for individual audio playback, whereas if a “zone player” is operating in a mode for
15 synchronous playback as part of some other active group when it receives an indication that it has
16 been added to a new user-created “zone scene” comprising a predefined group of “zone players”
17 for synchronous playback, the “zone player” will continue to operate as part of that other group.
18 In contrast, the act of creating a new ad-hoc group of “zone players” does cause a “zone player”
19 that has been added to the new ad-hoc group to automatically change its current operating mode
20 for audio playback by automatically configuring itself to engage in synchronous audio playback
21 as part of the newly-created ad-hoc group, which makes it impossible for a user to create a
22 predefined group for future use without disrupting the current operating mode of the “zone
23 players” that are selected as group members.

24 292. Second, because the “zone scene” technology divorces the act of creating a group
25 of “zone players” from the act of activating the group of “zone players” and allows a “zone player”
26 to be a member of a group existing in an inactive state while simultaneously operating outside of
27 that group, such technology provides a user with the ability to create a “zone scene” that includes
28 a “zone player” but then continue to use that “zone player” for individual audio playback (or for

1 required by claim 1 of the '885 Patent. Moreover, given that Dr. Schonfeld's "Squeezebox"
2 invalidity theories are based on physical Squeezebox players and he has made no allegations
3 regarding the prior-art status of the software-based Softsqueeze players, I fail to see the relevance
4 of his statement here that a Softsqueeze player corresponds to the claimed "first zone player."

5 **3. Squeezebox Players did not have "Zone Scenes" Functionality**

6 570. Claim 1 of the '885 Patent requires a "first zone player" that is programmed with
7 the capability to be added to two different "zone scenes" and then later operate in accordance with
8 a selected one of the two different "zone scenes."

9 571. As explained above in Section IX, a "zone scene" requires a group of "zone
10 players" that (i) is "predefined" and "previously-saved" at a user's request in advance of the group
11 being activated for synchronous playback as part of an initial "setup" phase during which the group
12 members are "added" to the "zone scene" by a user using a "network device" (*i.e.*, a controller
13 device) and (ii) initially exists in an inactive state such that the "zone players" added to the "zone
14 scene" are "to be configured for synchronous [media] playback" at a future time when the group
15 is invoked, but do not change their operating mode for audio playback at the time of creation and
16 can thereafter be used for individual audio playback while the "predefined," "previously-saved"
17 group remains in existence and is available to be "selected for invocation" in the future.

18 572. Based on the evidence I have reviewed regarding the Squeezebox system, it is my
19 opinion that the Squeezebox players discussed in Dr. Schonfeld's Opening Report did not have
20 the capability to be added to a "zone scene" – let alone the capability to be added to two different
21 "zone scenes" and then later operate in accordance with a selected one of the two different "zone
22 scenes," as required by claim 1 of the '885 Patent.

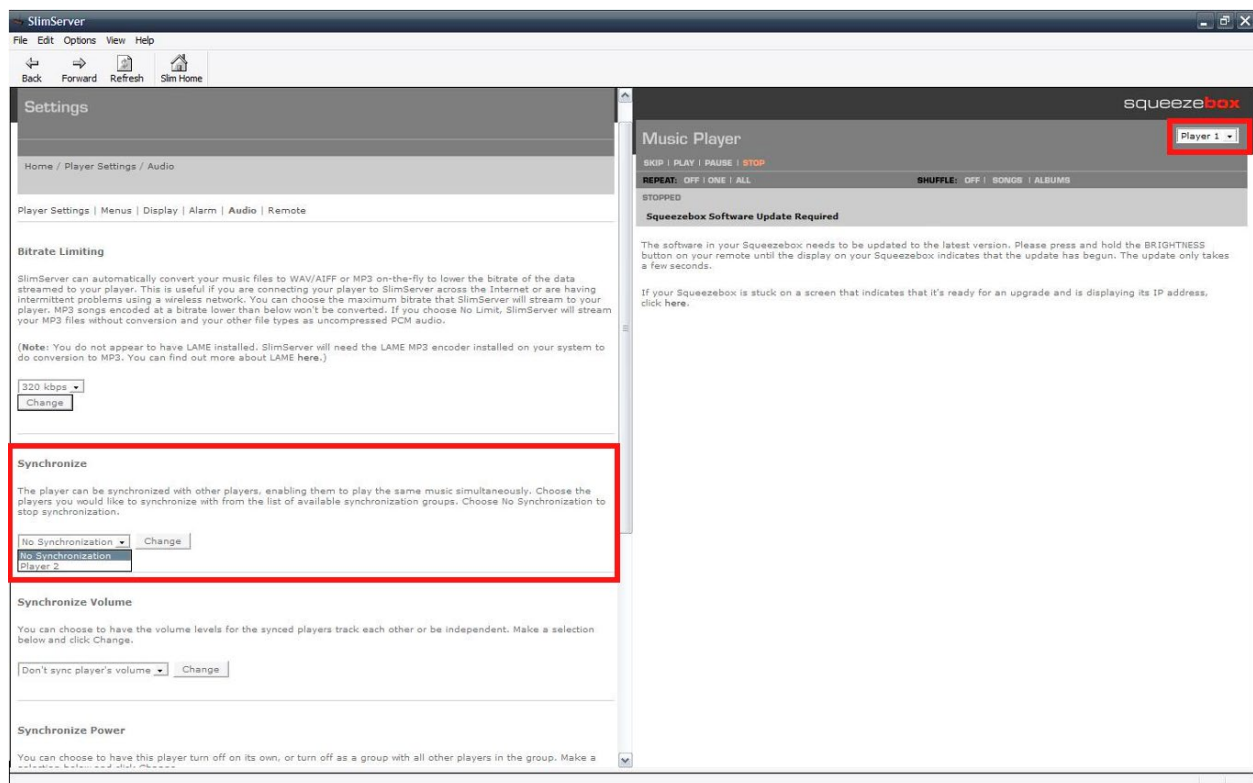
23 573. As explained above, Dr. Schonfeld's "Squeezebox" invalidity theories appear to be
24 based the functionality of various physical Squeezebox players, although throughout his Opening
25 Report, he also refers to software-based SoftSqueeze players. In my discussion below, I will
26 collectively refer to physical Squeezebox players and software-based SoftSqueeze players as
27 "Squeezebox players" for simplicity, although as noted above, it is not clear what relevance the
28 SoftSqueeze players have to Dr. Schonfeld's opinions. As also explained above, the Squeezebox

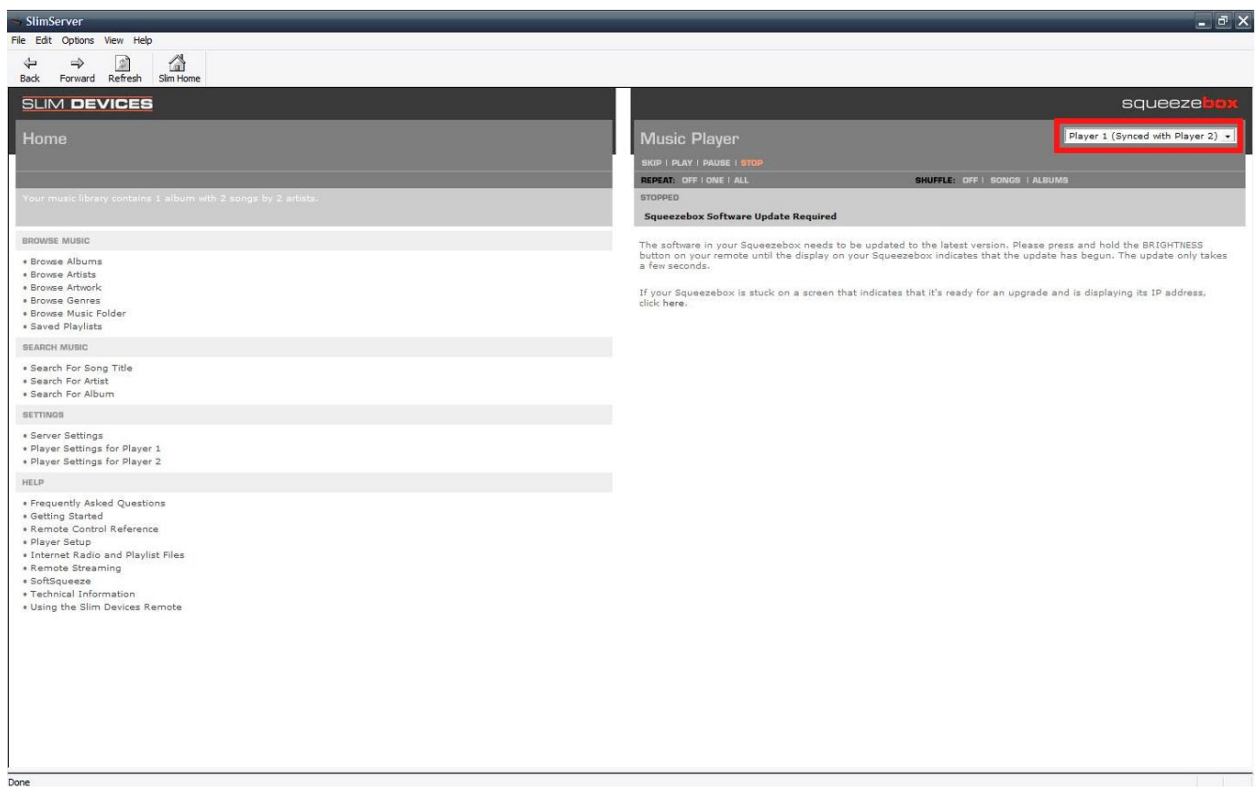
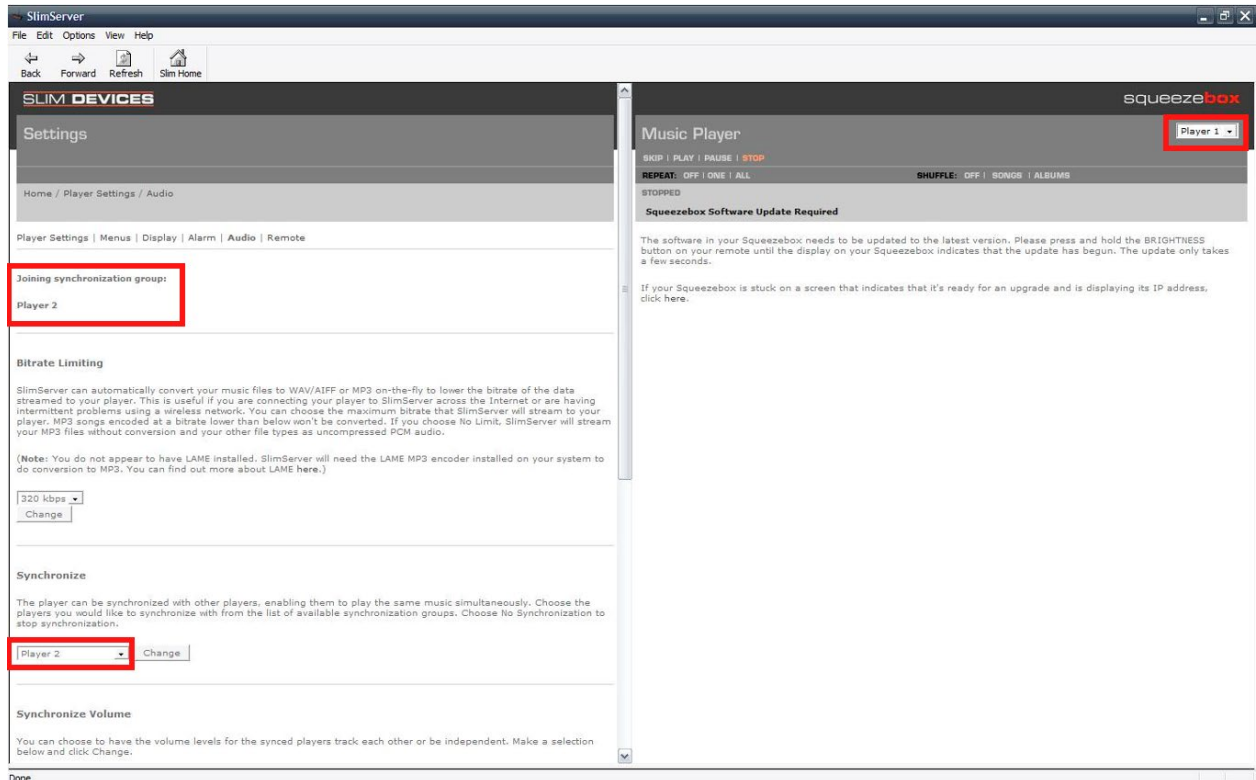
1 players relied upon by Dr. Schonfeld were powered by SlimServer software that had to be installed
2 on a separate computer – the SoftSqueeze players could not be used for audio playback without
3 this SlimServer software. *See, e.g.*, GOOG-SONOS-NDCA-00108095-588 at GOOG-SONOS-
4 NDCA-00108155-79, GOOG-SONOS-NDCA-00108192-94. In my discussion below, I will refer
5 to a system comprising a computer installed with the SlimServer software and at least one
6 Squeezebox player as a “Squeezebox system.”

7 574. The Squeezebox evidence I have reviewed indicates that at some point in time it
8 may have been possible for a user of a Squeezebox system to create something called a “sync
9 group,”¹³ which was a configuration in which the SlimServer software would attempt to cause
10 multiple Squeezebox players to play the same music simultaneously. *See, e.g.*,
11 Slim/Buttons/Synchronize.pm; Slim/Player/Sync.pm; Slim/Utils/Prefs.pm;
12 Slim/Player/Source.pm; Slim/Server/Squeezebox.pm; Slim/Player/Client.pm; GOOG-SONOS-
13 NDCA-00108095-588 at GOOG-SONOS-NDCA-00108162, GOOG-SONOS-NDCA-00108169,
14 GOOG-SONOS-NDCA-00108181. It appears that a user could create such a “sync group” in a
15 few different ways.

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27 ¹³ While the Squeezebox evidence I have reviewed says that Squeezebox players in a sync group were
28 “synchronized,” it is my opinion that this configuration would not have provided “synchronous playback
of media” as that phrase is used in the context of the ’885 Patent, because such a configuration would not
have involved any coordination between the Squeezebox players that had been grouped.

575. For instance, the Squeezebox evidence I have reviewed indicates that at some point in time it may have been possible for a user of a Squeezebox system to create a “sync group” by accessing a web-based user interface (UI) for the SlimServer software, navigating to the “Player Settings” page for a first Squeezebox player, selecting a second Squeezebox player from the “Synchronize” drop-down list, and then pressing the “Change” button in order to create a new “sync group” comprising the first and second Squeezebox players. One example of this process for creating a “sync group” in a Squeezebox system is shown in the following screenshots from Dr. Schonfeld’s Opening Report:





1
2 Schonfeld Op. Report at ¶ 356 (excerpted and annotations added). These screenshots appear to
3 show a hypothetical scenario where a version of the SlimServer software was used to create a
4 “sync group” that includes Squeezebox players named “Player 1” and “Player 2,” although it is
5 not clear what type of Squeezebox players were used for this hypothetical scenario.

6 576. The Squeezebox evidence I have reviewed indicates that at some point in time it
7 may have also been possible for a user of a Squeezebox system to create a “sync group” using an
8 infrared remote control for a hardware-based Squeezebox device, as described in the following
9 “Frequently Asked Question” from the Slim Devices website:

10 **How do I synchronize two Squeezeboxes so they play the same audio?**

11 Navigate into the Player Settings area with the remote control. Choose Synchronize, then select
12 the other player you want to synchronize with and press the RIGHT button. Both will play the
13 same thing and you can control their synchronized playback from either remote. Go back to the
14 same place and press RIGHT again to unsync.

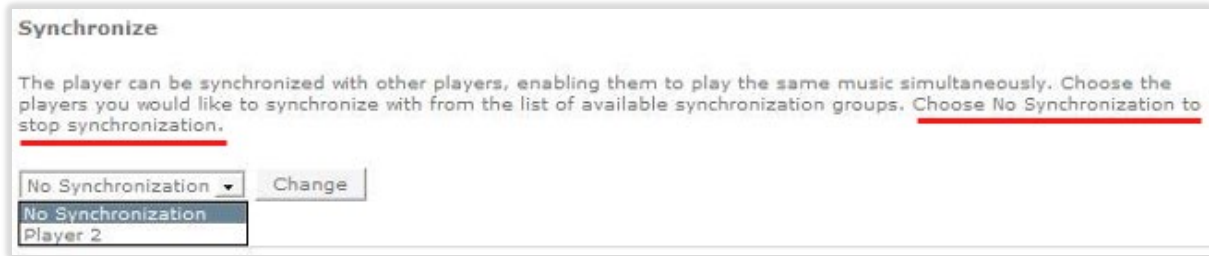
15 You can also set up synchronization from the Player Settings page in the web interface.

16 GOOG-SONOS-NDCA-00108095-588 at GOOG-SONOS-NDCA-00108169.

17 577. When a user created a “sync group” in one of the ways described above, the
18 Squeezebox evidence I have reviewed indicates that this would cause the SlimServer software to
19 (i) store information about the newly-created “sync group” in a file on the computer running the
20 SlimServer software and (ii) configure itself to control the audio buffer and playback on the
21 Squeezebox players in the “sync group” in order to cause those Squeezebox players to play back
22 the same music simultaneously. *See, e.g.,* Slim/Buttons/Synchronize.pm:functions():rightline;
23 Slim/Player/Sync.pm:sync(), Sync.pm:unsync(), Sync.pm:saveSyncPrefs(); Slim/Utils/Prefs.pm;
24 Slim/Player/Source.pm; Slim/Server/Squeezebox.pm; Slim/Player/Client.pm; GOOG-SONOS-
25 NDCA-00108095-588 at GOOG-SONOS-NDCA-00108162, GOOG-SONOS-NDCA-00108169-
26 70, GOOG-SONOS-NDCA-00108181.

27 578. Further, the Squeezebox evidence I have reviewed indicates that once a “sync
28 group” was created, the Squeezebox players added to the created “sync group” could not thereafter
be used for individual audio playback until the “sync group” was subsequently destroyed. *See,*

e.g., Slim/Player/Source.pm; Slim/Server/Squeezebox.pm. This is confirmed by the above screenshots from Dr. Schonfeld's Opening Report, which show that once the "sync group" including "Player 1" and "Player 2" is created, there is no way for a user to use either "Player 1" and "Player 2" for individual audio playback until the user destroys the "sync group" in some manner, such as by choosing the "No Synchronization" option in the "Player Settings" of "Player 1" or "Player 2," as shown below:



Schonfeld Op. Report at ¶356 (excerpted and annotations added).

579. In my opinion, this "sync group" functionality of the Squeezebox system is distinctly different from the "zone scenes" capability that is described and claimed in the '885 Patent, for several reasons.

580. First, a "sync group" of Squeezebox players was not "predefined" and "previously-saved" at a user's request in advance of the group being activated for synchronous playback as part of an initial "setup" phase during which the group members were "added" to the "sync group" by a user using a "network device" (i.e., a controller device), as required by claim 1 of the '885 Patent. To the contrary, the Squeezebox evidence I have reviewed makes clear that a "sync group" of Squeezebox players was a temporary, ad-hoc group that was automatically activated at the same time it was created. See, e.g., GOOG-SONOS-NDCA-00108095-588 at GOOG-SONOS-NDCA-00108169 (explaining that once a "sync group" is created, the SlimServer software will cause the "Squeezebox" players added to the "sync group" to "play the same thing" until the "sync group" is destroyed); Slim/Buttons/Synchronize.pm:functions():rightline; Slim/Player/Sync.pm:sync(), Sync.pm:unsync(), Sync.pm:saveSyncPrefs(); Slim/Utils/Prefs.pm; Slim/Player/Source.pm; Slim/Server/Squeezebox.pm; Slim/Player/Client.pm. This is confirmed by the various screenshots from Dr. Schonfeld's Opening Report, including the ones I have reproduced above. See Schonfeld

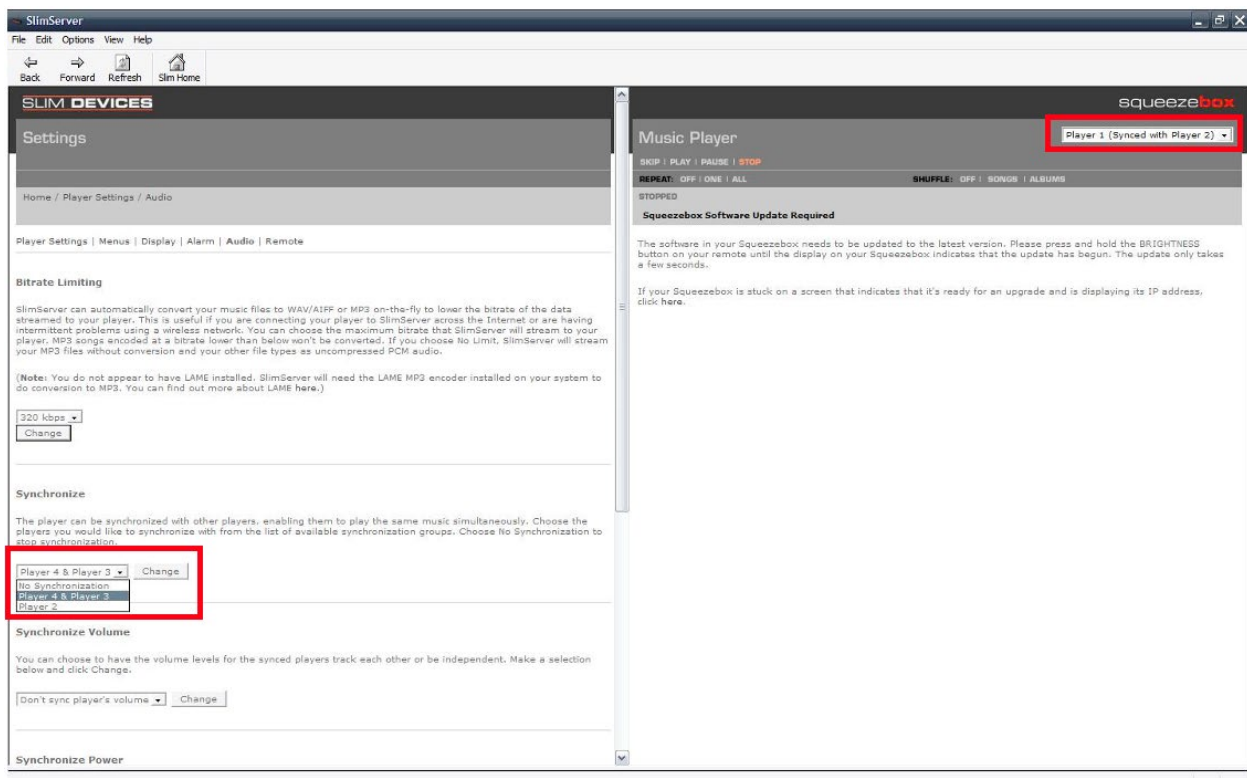
Op. Report at ¶ 356 (screenshots showing that the act of creating a “sync group” including “Player 1” and “Player 2” causes the SlimServer software to automatically activate the “sync group”); ¶¶ 372-378 (screenshots showing that the act of creating a “sync group” including “player1,” “player2,” and “player3” causes the SlimServer software to automatically activate the “sync group”); ¶¶ 428-432 (screenshots showing that the act of creating a “sync group” including “player1” and “player2” causes the SlimServer software to automatically activate the “sync group”).

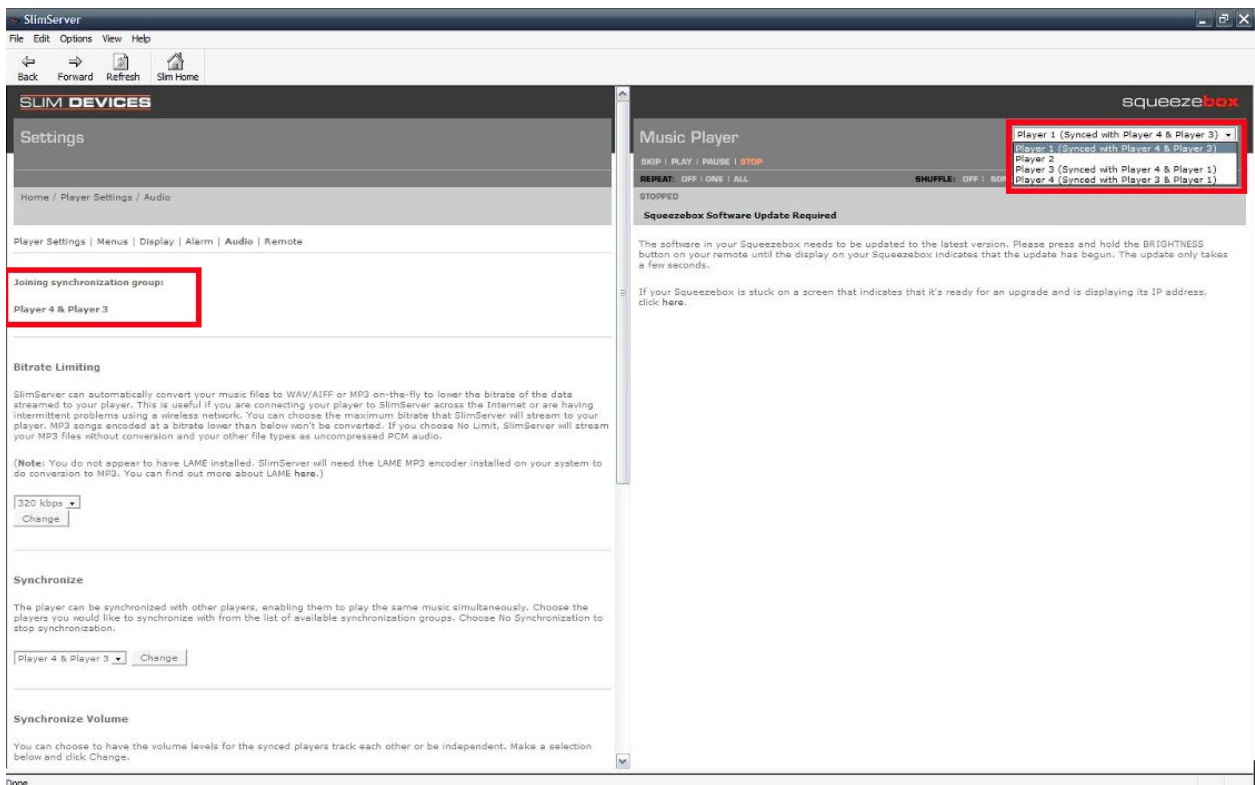
581. Second, a “sync group” of Squeezebox players did not initially exist in an inactive state such that the Squeezebox players added to the “sync group” could continue to be used for individual audio playback while the “sync group” remained in existence and was available to be “selected for invocation” in the future, as required by claim 1 of the ’885 Patent. To the contrary, the Squeezebox evidence I have reviewed makes clear that a “sync group” of Squeezebox players was automatically activated at the time of creation, and that once the “sync group” was created, it was not possible for a user to use any of the Squeezebox players added to the “sync group” for individual audio playback until the “sync group” was destroyed in some manner. *See, e.g.*, GOOG-SONOS-NDCA-00108095-588 at GOOG-SONOS-NDCA-00108169; Slim/Player/Source.pm; Slim/Server/Squeezebox.pm. Again, this is confirmed by various screenshots from Dr. Schonfeld’s Opening Report, including the ones I have reproduced above. *See* Schonfeld Op. Report at ¶ 356 (screenshots showing that once the “sync group” including “Player 1” and “Player 2” is created, there is no way for a user to use either “Player 1” and “Player 2” for individual audio playback until the user destroys the “sync group” in some manner); ¶ 357 (screenshot showing that none of the Squeezebox players in the system are available to be used for individual audio playback because each of the Squeezebox players is part of an automatically-activated “sync group”); ¶¶ 372-378 (screenshots showing that once the “sync group” including “player1,” “player2,” and “player3” is created, there is no way for a user to use “player1” for individual audio playback until the user destroys the “sync group” in some manner); ¶¶ 428-432 (screenshots showing that once the “sync group” including “player1” and “player2” is created, there is no way for a user to use “player1” for individual audio playback until the user destroys the “sync group” in some manner).

582. Third, a “sync group” of Squeezebox players was not a group of “zone players” that are “to be configured for synchronous playback of media” when the “sync group” is “invoked” for the additional reason that the invocation of a “sync group” – which took place automatically at the same time the “sync group” was created – did not involve any change to the configuration of the Squeezebox players as it relates to audio playback, which is another requirement of claim 1 of the ’885 Patent. To the contrary, the Squeezebox evidence I have reviewed indicates that a Squeezebox player added to a “sync group” would have had the same configuration for audio playback both before and after the “sync group” was invoked. *See, e.g.*, GOOG-SONOS-NDCA-00108095-588 GOOG-SONOS-NDCA-00108157 (explaining that the SlimServer software “powers Squeezebox”), GOOG-SONOS-NDCA-00108162 (same), GOOG-SONOS-NDCA-00108181 (explaining that “[t]he Slimserver controls the audio buffer and playback on all the players that are synchronized together”). In fact, based on my review of the Squeezebox evidence, it appears that a Squeezebox player would not have had any awareness that it had been added to a “sync group” that would have prompted the Squeezebox player to change its configuration for audio playback – the information about a “sync group” would have been exclusively maintained by the SlimServer software. *Id.*; *see also* Slim/Server/Squeezebox.pm:stream() (showing that the exact same ‘strm’ command was sent to every member of a “sync group” and that the ‘strm’ command did not include any indication that a Squeezebox player was part of a “sync group”); Schonfeld Op. Report at ¶ 366 (“The *SlimServer* server represents sync groups internally using the ‘master’, ‘slaves’, and ‘syncgroupid’ properties for a client (player).”), ¶ 368 (“The *SlimServer* persists the membership of a sync group by storing the definition of the syncgroupid property for each group member into the *SlimServer*’s preferences file.”). Dr. Schonfeld’s failure to rely on any source code for the Squeezebox players themselves further supports this opinion.

583. Fourth, even setting aside these other fundamental differences between a “sync group” of Squeezebox players and a “zone scene,” a Squeezebox player did not have the capability to simultaneously be a member of two different “sync groups” that are both in existence at the same time such that they are both available to be “selected for invocation,” which is another requirement of claim 1 of the ’885 Patent. To the contrary, the Squeezebox evidence I have

reviewed establishes that a Squeezebox player could only be a member of one “sync group” that was in existence at any given time, and that the only way a Squeezebox player in a first “sync group” could have been added to a second “sync group” was to destroy the first “sync group.” Slim/Player/Sync.pm:sync() (function that is called when a given client is added to new “sync group,” which starts out by calling an “unsync” function in order to remove the given client from any “sync group” that it was previously in), Sync.pm:unsync() (function that would be called by “sync” function in order to remove the given client from any “sync group” that it was previously in). This is confirmed by the screenshots below from Dr. Schonfeld’s report, which show that if “Player 1” is in a first “sync group” including “Player 1” and “Player 2,” the act of adding “Player 1” to a different “sync group,” such as a “sync group” including “Player 1,” “Player 3,” and “Player 4,” will first cause the “sync group” including “Player 1” and “Player 2” to be destroyed before the new “sync group” is created:





See Schonfeld Op. Report at ¶359.

584. Fifth, the Squeezebox evidence I have reviewed confirms that there was no ability for a user to create “sync group” that is “according to a common theme,” such as by assigning it a name, which fails to meet the requirements of Google's proposed construction of a “zone scene.”

585. I also note that the Squeezebox evidence I reviewed never uses the term “zone scenes” or otherwise describes any technology that would have enabled a user to (i) first create a group of Squeezebox players that was “predefined” and “previously-saved” in advance of being activated and then (ii) later select that group for “invocation” in order to activate it.

586. Thus, for at least these reasons, it is my opinion that the Squeezebox players relied upon by Dr. Schonfeld in his Opening Report did not have the capability to be added to a “zone scene” – let alone the capability to be added to two different “zone scenes” and then later operate in accordance with a selected one of the two different “zone scenes,” as required by claim 1 of the ’885 Patent.

587. Despite the foregoing evidence establishing that Squeezebox players did not have any “zone scenes” capability, in his Opening Report, Dr. Schonfeld opines the Squeezebox players

1 were capable of being added to a “zone scene” based on the theory that a “sync group” of
2 Squeezebox players is a “zone scene.” *See* Schonfeld Op. Report at ¶¶ 352-380. However, nothing
3 in Dr. Schonfeld’s Opening Report alters my opinion that a “sync group” of Squeezebox players
4 is not a “zone scene” for all of the reasons explained above, and as such, the Squeezebox players
5 did not have the capability to be added to a “zone scene.”

6 588. As an initial matter, I note that Dr. Schonfeld does not even attempt to explain how
7 a “sync group” of Squeezebox players meets the claimed requirements of a “zone scene,” such as
8 the claimed requirement of a group that is “predefined” and “previously saved” in advance of being
9 activated for synchronous playback or the claimed requirement of a group that is able to exist in
10 an inactive state where the group members are “to be configured for synchronous [media]
11 playback” at a future time when the group is “invoked.” *See* Schonfeld Op. Report at ¶¶ 352-380.
12 Instead, Dr. Schonfeld’s opinion that a “sync group” is a “zone scene” appears to be based almost
13 exclusively on his view that “the SlimServer allows a user to group together different Squeezebox
14 and Softsqueeze players so that synchronous playback is performed.” Schonfeld Op. Report at ¶
15 356; *see also id.* at ¶ 365 (“SlimServer supports synchronizing multiple Squeezebox players so
16 that they play the same audio”). While Dr. Schonfeld has not sufficiently established that a
17 Squeezebox system in 2005 actually had this capability, even if this statement were true, the mere
18 fact that a “sync group” could allegedly allow for “synchronous playback” does not make the “sync
19 group” a “zone scene” – there are several other requirements of a “zone scene” that distinguish it
20 from other types of playback groups, and a “sync group” fails to meet these other requirements for
21 the reasons explained above. I further note that Dr. Schonfeld’s statement at paragraph 356 that
22 “the SlimServer allows a user to group together different Squeezebox and Softsqueeze players so
23 that synchronous playback *is performed*” provides further support for my opinion that a “sync
24 group” is automatically activated at the time of creation and thus is not a “predefined,” “previously
25 saved” group of “zone players” that is able to exist in an inactive state where the group members
26 are “*to be configured* for synchronous [media] playback” at a future time when the group is
27 “invoked.”

28 589. At paragraphs 358-364 of his Opening Report, Dr. Schonfeld makes various other

1 statements about the alleged functionality of the Squeezebox system, including that (i) “[t]he user
2 of Slim Server may change the name and identifiers of the Squeezebox devices, which in turn
3 changes the name of the grouped Squeezebox devices,” (ii) “Slim Server allows a user to change
4 the synchronization groups after they have been created and stored,” (iii) “Slim Server also allows
5 a Squeezebox to play media without being in a synchronization group, which corresponds to the
6 claimed standalone mode,” (iv) “[t]hat media may be accessible to the SlimServer and organized
7 and processed by the SlimServer software such that it can be delivered to one or more
8 Squeezeboxes,” and (v) “[t]he user may name the Squeezebox something other than its IP
9 address.” Schonfeld Op. Report at ¶¶ 358-364. While Dr. Schonfeld has not sufficiently
10 established that a Squeezebox system in 2005 had this described functionality, even if all these
11 statements were accurate, they fail to establish that a “sync group” of Squeezebox players is a
12 “zone scene” as claimed, which requires a group of “zone players” that (i) is “predefined” and
13 “previously-saved” at a user’s request in advance of the group being activated for synchronous
14 playback as part of an initial “setup” phase during which the group members are “added” to the
15 “zone scene” by a user using a “network device” (*i.e.*, a controller device) and (ii) initially exists
16 in an inactive state such that the “zone players” added to the “zone scene” are “to be configured
17 for synchronous [media] playback” at a future time when the group is invoked, but do not change
18 their operating mode for audio playback at the time of creation and can thereafter be used for
19 individual audio playback while the “predefined,” “previously-saved” group remains in existence
20 and is available to be “selected for invocation” in the future.

21 590. In fact, if anything, Dr. Schonfeld’s statements at paragraphs 358-364 provide
22 further support for my opinion that a “sync group” is not a “zone scene.” For example, Dr.
23 Schonfeld’s statement that “Slim Server also allows a Squeezebox to play media without being in
24 a synchronization group, which corresponds to the claimed standalone mode” is consistent with
25 my understanding that a Squeezebox player could only be used for individual audio playback at
26 times when it was not in a “sync group,” which is one of the reasons that a “sync group” fails to
27 amount to a “zone scene.” As another example, Dr. Schonfeld’s statement that the “media” played
28 by the Squeezebox players was “processed by the SlimServer software such that it can be delivered

1 to one or more Squeezeboxes” is consistent with my understanding that the “sync group”
2 functionality was exclusively controlled by the SlimServer software and the Squeezebox players
3 themselves did not have any awareness of whether or not they were in a “sync group,” nor did they
4 make any change to their configuration as it relates to audio playback when a “sync group” was
5 invoked.

6 591. Turning to paragraphs 366-379 of his Opening Report, Dr. Schonfeld describes and
7 cites to, among other things, various SlimServer source code that was allegedly involved in the
8 process for creating a Squeezebox “sync group.” *See* Schonfeld Op. Report at ¶¶ 366-379.
9 However, Dr. Schonfeld’s discussion of the SlimServer source code in these paragraphs is entirely
10 consistent with my understanding of the “sync group” functionality that is summarized above, and
11 as such, that discussion provides further support for my opinion that a “sync group” of Squeezebox
12 players is not a “zone scene.”

13 592. At paragraphs 386-401 of his Opening Report, Dr. Schonfeld also describes a
14 scenario where one of the members of the “sync group” is “powered off” such that it is in a
15 “dormant state.” *See* Schonfeld Op. Report at ¶¶ 386-401; *see also id.* at ¶¶ 420-433, 460-468,
16 487-549, 577-591. According to Dr. Schonfeld, this scenario shows that “the
17 Squeezebox/SlimServer system can separate sync group definition from active sync group
18 participation with respect to powered-off players,” because “[a] powered-off player is temporarily
19 unsynced but still defined to be part of the persistent sync group.” *Id.* And while it is not entirely
20 clear because he never actually ties this scenario to the requirements of a “zone scene,” it appears
21 that Dr. Schonfeld is relying on this alleged capability as further support for his opinion that a
22 “sync group” is a “zone scene.” *See* Schonfeld Op. Report at ¶ 386. If so, I disagree that this
23 alleged capability of a “sync group” to include a “powered-off player” suddenly transforms the
24 “sync group” into a “zone scene.”

25 593. As explained above, the “sync group” functionality of a Squeezebox system was
26 controlled exclusively by the SlimServer software, and from the perspective of the SlimServer
27 software, a “sync group” is automatically activated at the time of creation regardless of whether
28 the Squeezebox players added to the “sync group” were powered on or powered off prior to that

1 time. *See, e.g.* Slim/Player/Sync.pm:sync(), Sync.pm:unsync(), Sync.pm:saveSyncPrefs();
2 Slim/Utils/Prefs.pm; Slim/Player/Source.pm; Slim/Server/Squeezebox.pm. Or said another way,
3 once the “sync group” is created, the SlimServer software would have been configured to cause
4 the Squeezebox players in the “sync group” to engage in grouped playback, regardless of whether
5 the Squeezebox players added to the “sync group” were powered on or powered off prior to that
6 time. The Squeezebox evidence I have reviewed confirms this in various ways.

7 594. First, the Squeezebox evidence I have reviewed demonstrates that, if a new “sync
8 group” was created that included one or more powered-off Squeezebox players, the information
9 about the new “sync group” that was saved by the SlimServer software would have identified all
10 of the members of the “sync group” – including any powered-off Squeezebox player(s). *See, e.g.*
11 Slim/Player/Sync.pm:sync(), Sync.pm:unsync(), Sync.pm:saveSyncPrefs(); Slim/Utils/Prefs.pm.
12 Dr. Schonfeld’s own discussion of this functionality in his Opening Report confirms this. *See*
13 Schonfeld Op. Report at ¶¶ 393, 400, 433, 468, 582, 589.

14 595. Second, the Squeezebox evidence I have reviewed demonstrates that, if a new “sync
15 group” was created that included one or more powered-off Squeezebox players, the UI for the
16 SlimServer software (and the powered-on SoftSqueeze players in the “sync group”) would have
17 shown that all of the SoftSqueeze players in the “sync group” were grouped together and
18 “synched” to one another – including any powered-off Squeezebox player(s) in the “sync group.”
19 *See* Schonfeld Op. Report at ¶¶ 431-432 (screenshots showing that “player1” and “player2” are
20 “synched” even though “player2” is powered off), ¶¶ 466-467 (screenshots showing that “player1”
21 and “player3” are “synched” even though “player3” is powered off), ¶ 488 (screenshot showing
22 that “player1” is “Synched with player3” even though “player3” is powered off), ¶ 492 (screenshot
23 showing that “player3” is “Synched with player1” and shares the same “playlist” even though
24 “player3” is powered off).

25 596. Third, the Squeezebox evidence I have reviewed demonstrates that, if a new “sync
26 group” was created that included a powered-off Squeezebox player and playback was then initiated
27 on that “sync group,” this would cause the powered-off Squeezebox players in the “sync group”
28 to automatically power back on and participate in the playback.

1 Slim/Player/Source.pm:playmode() (commenting that “if the player is off, we automatically power
2 on when we start to play”).

3 597. Fourth, the Squeezebox evidence I have reviewed demonstrates that, after a new
4 “sync group” is created that includes one or more powered-off Squeezebox players, the
5 Squeezebox players added to a “sync group” cannot thereafter be used for playback outside of that
6 “sync group” until the “sync group” is destroyed by a user in some manner, which confirms that
7 the “sync group” itself remains activated even if certain Squeezebox players in the “sync group”
8 are powered off. *See* Slim/Player/Source.pm; Slim/Server/Squeezebox.pm.

9 598. For these and other reasons, a POSITA would not consider a “sync group” that
10 includes a powered-off Squeezebox player to be a group that is “predefined” and “previously-
11 saved” at a user’s request *in advance of the group being activated for synchronous playback* as
12 part of an initial “setup” phase during which the group members were “added” to the “sync group”
13 by a user using a “network device” (*i.e.*, a controller device), nor would a POSITA consider a
14 “sync group” that includes a powered-off Squeezebox player to be a group that initially exists in
15 an inactive state such that the Squeezebox players added to the “sync group” could continue to be
16 used for individual audio playback while the “sync group” remained in existence and was available
17 to be “selected for invocation” in the future.

18 599. Dr. Schonfeld’s position to the contrary appears to be based almost exclusively on
19 his allegation at paragraphs 391-393 that (i) “[a] powered-off player is ‘temporarily’ unsynched
20 from its “sync group” and (ii) “[w]hen a non-master player is temporarily unsynched from its group,
21 it is removed from the master/slave data structures in dynamic memory,” but “the temporary
22 unsync is not recorded to the preferences file.” Schonfeld Op. Report at ¶¶ 391-393. Thus, Dr.
23 Schonfeld’s theory appears to be that because a powered-off Squeezebox player in this scenario is
24 identified in the SlimServer’s “preferences file” but not its “master/slave data structures in
25 dynamic memory,” this shows that the “sync group” is inactive. However, this theory fails for a
26 few different reasons.

27 600. To begin, the Squeezebox evidence I have reviewed shows that the functionality
28 and source code that Dr. Schonfeld is relying on here, which allegedly causes a powered-off

1 member of a “sync group” to be identified in the SlimServer’s “preferences file” but not its
2 “master/slave data structures in dynamic memory,” only applies to a scenario where a Squeezebox
3 player is powered off by a user *after* it has been added to a “sync group.” Schonfeld Op. Report
4 at ¶¶ 391-393. On the other hand, the functionality and source code that Dr. Schonfeld is relying
5 on does not apply to a scenario where a Squeezebox player is added to a “sync group” at a time
6 when the Squeezebox player is already powered off, and as a result, the powered-off member of
7 the “sync group” would have been identified in both the SlimServer’s “preferences file” and also
8 its “master/slave data structures in dynamic memory” in such a scenario. This is confirmed by Dr.
9 Schonfeld’s own screenshots at paragraphs at paragraphs 431-432, 466-467, 488, 492, which I
10 have summarized above. Thus, even under Dr. Schonfeld’s own theory that activation of a “sync
11 group” is dictated by whether the full set of group members is identified in the Slimserver’s
12 “master/slave data structures in dynamic memory,” a “sync group” will always automatically begin
13 in an active state at the time it is created regardless of whether or not it includes powered-off
14 Squeezebox players, which is contrary to the requirement of the claimed “zone scene” that the
15 “predefined,” “previously saved” group initially exists in an inactive state such that the “zone
16 players” added to the “zone scene” are “to be configured for synchronous [media] playback” at a
17 future time when the group is invoked.

18 601. Moreover, I disagree that powering off a group member after a “sync group” is
19 activated amounts to deactivating the “sync group.” That is because, in such a scenario, the
20 SlimServer’s “preferences file” would have still indicated that the “sync group” is active, the
21 SlimServer software would have still been configured to cause the Squeezebox players in the “sync
22 group” to engage in grouped playback, and it would still not be possible to use any of the group
23 members outside of the “sync group.” But regardless, even if Dr. Schonfeld were correct that
24 powering down a member of a “sync group” would have forced a “sync group” into a temporary,
25 deactivated state after being created, I disagree that this somehow transforms a “sync group” into
26 a “zone scene” for all of the other reasons explained above.

27 602. In addition to the foregoing reasons why a “sync group” comprising a powered-off
28 Squeezebox player is not a claimed “zone scene,” it is my opinion that such a scenario also fails

1 to meet various other limitations of claim 1 of the '885 Patent, as explained in further detail below.

2 603. Turning to claim 1's additional requirement that the "first zone player" be
3 programmed with the capability to be a member of two different "zone scenes" comprising
4 overlapping "predefined" groups that are then both in existence at the same time such that they are
5 both available to be "selected for invocation," Dr. Schonfeld opines that a Squeezebox player
6 would have met this requirement as well, based on the following theory:

7 [A] single player may be defined in separate sync groups on different SlimServer
8 configurations, persisted to different preferences files. As one example, a player
9 may be used with different servers, which define different sync groups and persist
10 to different preferences files. One example (v6.2.1) is using a player both with a
11 local SlimServer and with the SqueezeNetwork. As another example, a player may
be used with different invocations of the same server. Each invocation uses a
different preference file, specified on the command line using the '--prefsfile'
option.

12 Schonfeld Op. Report at ¶ 385; *see also id.* at ¶¶ 402-405 (discussing a "'serv' SlimProto message
13 from SlimServer to player that tells a player to switch servers"); ¶¶ 406-551 (describing testing of
14 a hypothetical setup that allegedly included two VMs running separate instances of SlimServer
15 software and three VMs running separate instances of SoftSqueeze software and was allegedly
16 used to create a first "sync group" including "player1" and "player2" while the players were
17 connected to the first SlimServer instance and then to create a second "sync group" including
18 "player1" and "player3" while the players were subsequently connected to the second SlimServer).
19 However, this theory is flawed for a number of reasons.

20 604. First, a "sync group" of Squeezebox players is not a "zone scene" for all of the
21 reasons explained above. Thus, for this reason alone, Dr. Schonfeld's attempt to rely on "sync
22 groups" created using two independent SlimServer instances fails to meet the claimed requirement
23 that the "first zone player" be programmed with the capability to be a member of two different
24 "zone scenes" comprising overlapping "predefined" groups that are both in existence at the same
25 time and are both available to be "selected for invocation."

26 605. Second, even setting aside the other fundamental differences between a "sync
27 group" and a "zone scene," I disagree that using two independent SlimServer instances to create
28 two different "sync groups" meets the claimed requirement that the "first zone player" be

1 programmed with the capability to be a member of two different groups that are both in existence
2 at the same time such that they are both available to be “selected for invocation.” In such a
3 hypothetical scenario, the Squeezebox players could only be connected to one SlimServer instance
4 at any given time – as confirmed by Dr. Schonfeld’s own description – and once the Squeezebox
5 players are disconnected from the first SlimServer instance, a POSITA would no longer consider
6 the Squeezebox players to be members of any “sync group” that was created at the first SlimServer
7 instance. To the contrary, a POSITA would understand that when the Squeezebox players were
8 hypothetically disconnected from the first SlimServer instance and connected to the second
9 SlimServer instance, this would have formed an entirely different system in which the previously-
10 created “sync group” does not exist and is certainly not available to be selected or used for audio
11 playback.

12 606. Third, Dr. Schonfeld fails to present any evidence that the hypothetical setup he
13 describes where a user installed and used two different SlimServer instances to create two different
14 “sync groups” including overlapping Squeezebox players was ever actually implemented – let
15 alone implemented at a time that would qualify it as prior art to the ’885 Patent.

16 607. Fourth, Dr. Schonfeld’s multiple SlimServer theory is also premised on a number
17 of statements that are unclear, unsupported, and/or otherwise fail to provide support for Dr.
18 Schonfeld’s opinion that a Squeezebox player could be a member of two different “sync groups”
19 that are both in existence at the same time. For example, Dr. Schonfeld says that “a player may
20 be used with different invocations of the same server,” but Dr. Schonfeld fails to explain or provide
21 support for this statement, and it is not clear what this means or how it differs from Dr. Schonfeld’s
22 hypothetical scenario involving two different SlimServer instances. As another example, Dr.
23 Schonfeld says that “SlimServer v6.2.1 supports a 'serv' SlimProto message from SlimServer to
24 player that tells a player to switch servers,” but Dr. Schonfeld fails to explain the significance or
25 relevance of this alleged functionality to his opinion that a Squeezebox player could be a member
26 of two different “sync groups” that are both in existence at the same time, nor does he explain how
27 such alleged functionality would be incorporated into SlimServer v5.3.1 upon which he primarily
28 relies. *See* Schonfeld Op. Report at ¶¶402-403. As yet another example, Dr. Schonfeld mentions

1 “[t]he SlimProto TCP Protocol documentation on the current Squeezebox Wiki” that describes a
2 “*later* version of the ‘serv’ message” that allegedly “supports a ‘\$syncgroupid’ optional parameter
3 to enable a player to re-join its sync group when the player connects to the new server,” but Dr.
4 Schonfeld fails to establish that this “*later* version of the ‘serv’ message” was incorporated into
5 any Squeezebox system that could possibly qualify as prior art – nor have I seen any evidence of
6 this – and Dr. fails likewise to explain the significance or relevance of this “later version of the
7 ‘serv’ message” to his opinion that a Squeezebox player could be a member of two different “sync
8 groups” that are both in existence at the same time. *Id.* at ¶¶404-405; SONOS-SVG2-00226941-
9 946

10 (https://wiki.slimdevices.com/index.php/SlimProtoTCPProtocol.html#Command_.22grfd.22). In
11 any event, none of these statements change my opinion that the Squeezebox players being relied
12 upon by Dr. Schonfeld were not capable of being added to even a single “zone scene,” let alone
13 capable of being members of two different “zone scenes” comprising overlapping “predefined”
14 groups that are both in existence at the same time such that they are both available to be “selected
15 for invocation.”

16 608. Thus, nothing in Dr. Schonfeld’s Opening Report alters my opinion that the
17 Squeezebox players upon which he is relying did not have the capability to be added to a “zone
18 scene” – let alone the capability to be added to two different “zone scenes” and then later operate
19 in accordance with a selected one of the two different “zone scenes,” as required by claim 1 of the
20 ’885 Patent.

21 4. Squeezebox Players Did Not Meet Limitations 1.5 / 1.6

22 609. Limitations 1.5 / 1.6 of claim 1 of the ’885 Patent requires the “first zone player”
23 to be programmed with the capability for, “while operating in a standalone mode in which the first
24 zone player is configured to play back media individually in a networked media playback system
25 comprising the first zone player and at least two other zone players,” “(i) receiving, from a network
26 device over a data network, a first indication that the first zone player has been added to a first
27 zone scene comprising a first predefined grouping of zone players including at least the first zone
28 player and a second zone player that are to be configured for synchronous playback of media when

1 the first zone scene is invoked.”

2 610. In my opinion, Squeezebox does not meet this requirement.

3 611. First, as explained above, the evidence I have reviewed establishes that the
4 Squeezebox players being relied upon by Dr. Schonfeld did not have any capability to be added to
5 a “zone scene” comprising a “predefined grouping of zone players . . . that are to be configured
6 for synchronous playback of media when the . . . zone scene is invoked,” and for this reason alone,
7 a Squeezebox player did not have the capability to “receiv[e], from a network device over a data
8 network, a first indication that the [Squeezebox player] has been added to a first zone scene
9 comprising a first predefined grouping of [Squeezebox players] including at least the [recipient
10 Squeezebox player] and a second [Squeezebox player] that are to be configured for synchronous
11 playback of media when the first zone scene is invoked.”

12 612. Second, even setting aside the fundamental differences between a “sync group” and
13 a “zone scene,” the Squeezebox evidence that I have reviewed establishes that the Squeezebox
14 players being relied upon by Dr. Schonfeld did not have the capability to “receiv[e], from a
15 network device over a data network, a first indication that the [Squeezebox player] has been added
16 to” a “sync group.”

17 613. Despite the clear absence of this functional capability from the Squeezebox players
18 being relied upon by Dr. Schonfeld, Dr. Schonfeld opines at paragraph 352 that Squeezebox
19 discloses limitation 1.6. Schonfeld Op. Report at ¶ 352. And although not entirely clear, this
20 opinion appears to be based on a theory that (i) when a user created a “sync group” including a
21 Squeezebox player using an infrared remote control or a web-based UI of a SlimServer, this would
22 have caused the SlimServer to send a series of “grfd” messages to the Squeezebox player that
23 contain raw display bits (sometimes referred to as “bitmaps”) for the Squeezebox player’s
24 graphical display, (ii) this series of “grfd” messages would have caused the Squeezebox player’s
25 graphical display to have the appearance that a “Synchronize” settings screen showing a text string
26 of “PRESS RIGHT TO SYNC WITH” would shift off of the left of the screen and be replaced by
27 an updated “Synchronize” settings screen showing a text string of “PRESS RIGHT TO UNSYNC
28 WITH,” and (iii) the last “grfd” message containing the raw display bits for the updated

1 “Synchronize” settings screen that includes the text string of “PRESS RIGHT TO UNSYNC
2 WITH” amounts to “a first indication that the [Squeezebox player] has been added to a first zone
3 scene” *See* Schonfeld Op. Report at ¶¶ 376-380; *see also id.* at ¶¶ 434, 442-452;
4 Slim/Buttons/Synchronize.pm; Slim/Display/VFD/Animation.pm; Slim/Player/SqueezeboxG.pm.
5 I disagree with this theory for several reasons.

6 614. As an initial matter, because a “sync group” is not a “zone scene” for all of the
7 reasons explained above, any “grfd” message sent from the SlimServer software to a Squeezebox
8 player as a result of a user creating a “sync group” could not possibly amount to a “first indication
9 that the [Squeezebox player] has been added to a first zone scene.”

10 615. Moreover, even setting aside the fundamental differences between a “sync group”
11 and a “zone scene,” I disagree that the “grfd” message identified by Dr. Schonfeld constitutes a
12 “first indication that the [Squeezebox player] has been added to” a first “sync group.” As explained
13 above, such a “grfd” message would have merely contained raw display bits for a “Synchronize”
14 settings screen that includes a text string of “PRESS RIGHT TO UNSYNC WITH,” which the
15 Squeezebox player would have then used to change the appearance of its graphical display.
16 However, these raw display bits would have had no meaning to the Squeezebox player, nor would
17 the Squeezebox have attempted to interpret the raw display bits in any way – it would have simply
18 used them to populate its graphical display. As such, a POSITA would not consider these raw
19 display bits for a “Synchronize” settings screen that shows a text string of “PRESS RIGHT TO
20 UNSYNC WITH” to be an “indication” to the Squeezebox player that it “has been added” to a
21 “sync group.”

22 616. Thus, nothing in Dr. Schonfeld’s Opening Report alters my opinion that the
23 Squeezebox players being relied upon by Dr. Schonfeld did not have the functional capability
24 required by limitations 1.5 / 1.6.

25 **5. Squeezebox Players Did Not Meet Limitations 1.5 / 1.7**

26 617. Limitations 1.5 / 1.7 of claim 1 of the ’885 patent requires the “first zone player”
27 to be programmed with the capability for, “while operating in a standalone mode in which the first
28 zone player is configured to play back media individually in a networked media playback system

1 comprising the first zone player and at least two other zone players,” “(ii) receiving, from the
2 network device over the data network, a second indication that the first zone player has been added
3 to a second zone scene comprising a second predefined grouping of zone players including at least
4 the first zone player and a third zone player that are to be configured for synchronous playback of
5 media when the second zone scene is invoked, wherein the second zone player is different than
6 the third zone player.”

7 618. In my opinion, Squeezebox fails to meet this requirement for multiple reasons.

8 619. First, as I explained above, the Squeezebox evidence I have reviewed establishes
9 that Squeezebox players did not have any capability to be added to a “zone scene” comprising a
10 “predefined grouping of zone players . . . that are to be configured for synchronous playback of
11 media when the . . . zone scene is invoked,” and for this reason alone, a Squeezebox player did not
12 have the capability to “receiv[e], from the network device over the data network, a second
13 indication that the [Squeezebox player] has been added to a second zone scene comprising a second
14 predefined grouping of [Squeezebox players] including at least the [recipient Squeezebox player]
15 and a third [Squeezebox player] that are to be configured for synchronous playback of media when
16 the second zone scene is invoked,” where the second Squeezebox player included in the “first zone
17 scene” is different from the third Squeezebox player included in this “second zone scene.”

18 620. Second, a Squeezebox player did not have the capability to receive a “second
19 indication that [it] has been added to a second zone scene comprising a second predefined grouping
20 of [Squeezebox players]” while remaining a member of a “first zone scene comprising a first
21 predefined grouping of [Squeezebox players]” that is still in existence such that both the “first zone
22 scene” and the “second zone scene” are thereafter both available to be “selected for invocation,”
23 which is required by limitations 1.5 / 1.7 when viewed in combination with the other surrounding
24 claim language and serves as an additional reason why a Squeezebox player did not meet
25 limitations 1.5 / 1.7 of the '885 Patent. Indeed, even setting aside the fundamental differences
26 between a “sync group” and a “zone scene,” a Squeezebox player could not have been a member
27 of multiple different “sync groups” that are both in existence at the same time and available to be
28 “selected for invocation.”

1 621. Third, even setting aside the fundamental differences between a “sync group” and
2 a “zone scene” and the inability to be a member of multiple different “sync groups” that are both
3 in existence at the same time and available to be “selected for invocation,” the Squeezebox
4 evidence that I have reviewed establishes that the Squeezebox players being relied upon by Dr.
5 Schonfeld did not have the capability to “receiv[e], from the network device over the data network,
6 a second indication that the [Squeezebox player] has been added to” a “sync group.”

7 622. Despite the clear absence of this functional capability from the Squeezebox players
8 being relied upon by Dr. Schonfeld, Dr. Schonfeld opines at paragraph 383 that Squeezebox
9 “Squeezebox discloses or renders obvious” limitation 1.7. Schonfeld Op. Report at ¶ 383. And
10 although not entirely clear, this opinion appears to be based on a theory that (i) “a single player
11 may be defined in separate sync groups on different SlimServer configurations,” and (ii) after a
12 user would have connected a Squeezebox player to a second SlimServer instance and then created
13 a “sync group” at the second SlimServer instance that included the Squeezebox player, the
14 Squeezebox player would have received a “grfd” message encoding an “UNSYNCH_WITH” text
15 string from the second SlimServer instance, which amounts to “a second indication that the
16 [Squeezebox player] has been added to a second zone scene . . .” See Schonfeld Op. Report at ¶¶
17 384-385, *see also id.* at ¶¶ 453-484, 551. I disagree with this theory for several reasons.

18 623. As an initial matter, because a “sync group” is not a “zone scene” for all of the
19 reasons explained above, any “grfd” message sent from a second SlimServer instance to a
20 Squeezebox player as a result of a user creating a “sync group” at the second SlimServer instance
21 could not possibly amount to a “second indication that the [Squeezebox player] has been added to
22 a second zone scene.”

23 624. Moreover, even setting aside the other fundamental differences between a “sync
24 group” and a “zone scene,” this theory is flawed for several other reasons as well.

25 625. First, I disagree that using two independent SlimServer instances to create two
26 different “sync groups” meets the claimed requirement of receiving “a second indication that [the
27 Squeezbox player] has been added to” a second “sync group” while remaining a member of a first
28 “sync group” that is still in existence such that both the first “sync group” and the second “sync

group” are thereafter both available to be “selected for invocation.” That is because a Squeezebox player in such a hypothetical scenario could only be connected to one SlimServer instance at any given time, and once the Squeezebox player is disconnected from the first SlimServer instance, a POSITA would no longer consider the Squeezebox player to be a member of the first “sync group” that was previously created at the first SlimServer instance. To the contrary, a POSITA would understand that when the Squeezebox player was hypothetically disconnected from the first SlimServer instance and connected to the second SlimServer instance, this would have formed an entirely different system in which the first “sync group” does not exist and is certainly not available to be “selected for invocation.”

626. Second, I disagree that “grfd” message identified by Dr. Schonfeld constitutes a “second indication that the [Squeezebox player] has been added to” a second “sync group.” As explained above, such a “grfd” message would have merely contained raw display bits corresponding to a text string of “UNSYNCH_WITH,” which the Squeezebox player would have then used to change its graphical display for the “Synchronize” settings menu option. However, these raw display bits would have had no meaning to the Squeezebox player, nor would the Squeezebox have attempted to interpret the raw display bits – it would have simply used them to populate its graphical display. As such, a POSITA would not consider these raw display bits for the “UNSYNCH_WITH” text string to be a “second indication” to the Squeezebox player that it “has been added” to a second “sync group.”

627. Third, in Dr. Schonfeld’s hypothetical scenario, the first “grfd” message identified by Dr. Schonfeld would be received from a first SlimServer instance and the second “grfd” message identified by Dr. Schonfeld would be received from a second SlimServer instance, where these two SlimServer instances have different MAC addresses and different IP addresses. *See* Schonfeld Op. Report at ¶ 407. In my opinion, a POSITA would consider these two independent SlimServer instances to be two different “network devices.” However, limitation 1.7 requires the “first indication” and the “second indication” to be received from the same “network device,” which is yet another reason that Dr. Schonfeld’s theory for limitation 1.7 is flawed. Notably, in his Opening Report, Dr. Schonfeld appears to have simply ignored this requirement, because he

1 makes no attempt at all to explain how two independent SlimServer instances could be mapped to
2 a single “network device.”

3 628. Fourth, Dr. Schonfeld fails to present any evidence that the hypothetical setup he
4 describes where a user installed and used two different SlimServer instances to create two different
5 “sync groups” including overlapping Squeezebox players was ever actually implemented – let
6 alone implemented at a time that would qualify it as prior art to the '885 Patent.

7 629. Fifth, as summarized above, Dr. Schonfeld’s multiple SlimServer theory is also
8 premised on a number of statements that are unclear, unsupported, and/or otherwise fail to provide
9 support for Dr. Schonfeld’s opinion that a Squeezebox player had the functional capability
10 required by limitation 1.7.

11 630. Thus, nothing in Dr. Schonfeld’s Opening Report alters my opinion that the
12 Squeezebox players being relied upon by Dr. Schonfeld did not have the functional capability
13 required by limitations 1.5 / 1.7.

14 631. I further note that there is no evidence that anyone ever installed or used a
15 Squeezebox system having two separate servers (or server instances) for the same Squeezebox
16 system at any time prior to the invention date or priority date of the '885 Patent.

17 632. Thus, nothing in Dr. Schonfeld’s Opening Report alters my opinion that a
18 Squeezebox player did not have the functional capability required by limitations 1.5 / 1.7.

19 **6. Squeezebox Players Did Not Meet Limitation 1.8**

20 633. Limitation 1.8 of claim 1 of the '885 patent requires the “first zone player” to be
21 programmed with the capability for “after receiving the first and second indications, continuing to
22 operate in the standalone mode until a given one of the first and second zone scenes has been
23 selected for invocation.”

24 634. In my opinion, Squeezebox fails to disclose limitation 1.8 of claim 1 of the '885
25 Patent for multiple reasons.

26 635. First, as I explained above, the evidence I have reviewed establishes that
27 Squeezebox players did not have any “zone scenes” capability, let alone any capability to receive
28 the claimed “first indication that the first zone player has been added to a first zone scene” or the

1 that he and Sonos “[d]iscussed the manner in which the instant claims feature beyond the Bose
2 [Lifesytle 50 System] reference in as much as Bose does not discuss the claims selectively dynamic
3 groupings of media players.” *See* August 19, 2020 Examiner-Initiated Interview Summary
4 (regarding a July 31, 2020 interview).

5 754. Given that these references were considered by the USPTO during prosecution of
6 the ’885 Patent, and the USPTO allowed the ’885 Patent (including claim 1) to issue over these
7 references, I understand that Dr. Schonfeld has the added burden of overcoming the deference that
8 is due to a qualified government agency, such as the USPTO, that is presumed to have properly
9 done its job based on its expertise in interpreting references, its understanding of the level of
10 ordinary skill in the art, and its duty to issue only valid patents. However, it is my opinion that
11 Dr. Schonfeld failed to satisfy this added burden.

12 755. In the sub-sections below, I have provided a summary of the bases for my opinions,
13 as well as responses to Dr. Schonfeld’s opinions.

14 **1. Dr. Schonfeld’s “Bose Lifestyle” System Does Not Qualify as Prior Art**

15 756. Dr. Schonfeld relies on an alleged prior art system called the “Bose Lifestyle 50
16 System,” which Dr. Schonfeld refers to as “Bose Lifestyle” for short. *See* Schonfeld Op. Report
17 at ¶619. Although unclear, Dr. Schonfeld appears to be assertion that the Bose Lifestyle 50 System
18 is system prior art that “was publicly available, on sale, offered for sale, and described in printed
19 publications both before the critical date (i.e., prior to September 12, 2005), before the alleged
20 conception date (i.e., prior to December 21, 2005), and prior to the patent filing date on September
21 12, 2006.” *Id.* Despite appearing to rely on the Bose Lifestyle 50 System as system prior art, Dr.
22 Schonfeld does not provide any analysis or testing of an actual Bose Lifestyle 50 System.

23 757. As noted above, in asserting that the Bose Lifestyle 50 System invalidates claim 1
24 of the of the ’885 Patent, Dr. Schonfeld relies on various disclosures related to different Bose
25 products, some of which have no relation to and are incompatible with the Bose Lifestyle 50
26 System. These various Bose products include:

- 27 • Bose Lifestyle 50 System;
- 28 • Bose Lifestyle SA-2 and SA-3 Amplifiers and their ability to be added to a Bose link

media center of a Bose Lifestyle® 18 series II, 28 series II, 38 or 48 home entertainment system;

- Bose link communication protocol; and
- Bose FreeSpace EF Series II Business Music System.

758. For the reasons explained below, it is my opinion that Dr. Schonfeld's alleged Bose Lifestyle 50 System does not qualify as prior art.

759. As an initial matter, Dr. Schonfeld has not even alleged, let alone explained how or why, these different Bose products would be combined into a single system and/or that such a combination was contemplated or actually made at a date prior to the December 21, 2005 invention date and/or the September 12, 2006 priority date of the '885 Patent. For this reason alone, Dr. Schonfeld's "Bose Lifestyle" does not qualify as prior.

760. One of the primary documents upon which Dr. Schonfeld relies to support his opinions – and the only document specifically directed to the Bose Lifestyle 50 System – is the "Bose Lifestyle 50 System Owner's Guide" (referred to herein as "Bose Lifestyle 50 Guide"), which bears a date of October 17, 2001. *See* BOSE_SUB-0000001-55 at 1. While Dr. Schonfeld characterizes the October 17, 2001 date as a "publication date," Dr. Schonfeld has not established that the Bose Lifestyle 50 Guide was publicly available on that date or any date prior to the December 21, 2005 invention date and/or September 12, 2006 priority date of the '885 Patent. Dr. Schonfeld also has not established that the disclosures in the Bose Lifestyle 50 Guide were embodied in a system that was publicly available in the United States at a time that would qualify the system as prior art.

761. Dr. Schonfeld also appears to assert that the Bose Lifestyle 50 System itself was "publicly available at least as of 2003." *See* Schonfeld Op. Report at ¶154. Dr. Schonfeld cites to two different websites to support this assertion. The first is the Bose website, which states that the Bose Lifestyle 50 System was "[s]old from 1970-2003." SONOS-SVG2-00226910 (https://www.bose.com/en_us/support/products/bose_home_theater_support/bose_5_speaker_home_theater_support/ls50.html). However, this website does not indicate whether the Bose Lifestyle 50 System was "publicly available" in the United States at least as of 2003. At best, this

1 website suggests that wherever the Bose Lifestyle 50 System was available, it was discontinued in
2 2003. I also note that the information on this webpage does not appear to be accurate as I have
3 seen no evidence that the Bose Lifestyle 50 System was sold as far back as 1970. To the contrary,
4 the Bose Lifestyle 50 Guide references a CD player and it is my understanding that the first CD
5 player was not commercially released until 1982. See SONOS-SVG2-00226948
6 (https://en.wikipedia.org/wiki/Sony_CDP-101). Similarly, the third party “audio review” website
7 cited by Dr. Schonfeld also does not establish that the Bose Lifestyle 50 System was “publicly
8 available” in the United States at least as of 2003. To the contrary, two of the 2002-2003 reviews
9 reference foreign currency suggesting that the reviews apply to systems that may have been
10 publicly available outside of the United States. *Id.*
11 <http://www.audioreview.com/product/other/mini-systems/bose/lifestyle-50.html>.

12 762. Confusingly, in describing the Bose Lifestyle 50 System, Dr. Schonfeld also relies
13 on disclosure in various materials related to other Bose products, namely, Bose Lifestyle SA-2 and
14 SA-3 Amplifiers and their ability to be added to a Bose link media center of a Bose Lifestyle® 18
15 series II, 28 series II, 38 or 48 home entertainment system; Bose link communication protocol; and
16 Bose FreeSpace EF Series II Business Music System. Dr. Schonfeld has not explained how such
17 disclosure is relevant to the operation of the actual Bose Lifestyle 50 System upon which he claims
18 to rely for invalidity. Moreover, Dr. Schonfeld has not even alleged, let alone explained how or
19 why, these different Bose products would be combined with the Bose Lifestyle 50 System and/or
20 that such a combination was contemplated or actually made at a date prior to the December 21,
21 2005 invention date and/or the September 12, 2006 priority date of the '885 Patent.

22 763. For example, in describing the Bose Lifestyle 50 System, Dr. Schonfeld relies on
23 disclosure in materials related to the Bose FreeSpace EF Series II Business Music System (“Bose
24 FreeSpace System”). *See, e.g.*, Schonfeld Op. Report at ¶150 (citing BOSE_SUB-0000056-59 at
25 56), ¶632 (citing BOSE_SUB-0000062-136 at 122; BOSE_SUB-0000140-147 at 144-145), ¶638
26 (citing BOSE_SUB-0000150-156 at 150, BOSE_SUB-0000157-160 at 157). One of the primary
27 documents upon which Dr. Schonfeld relies to support his opinions regarding the Bose FreeSpace
28 System is the “Bose FreeSpace EF Series II Business Music System Owner’s Guide” (“Bose

FreeSpace Owner's Guide"), which bears a date of July 10, 2004. *See* BOSE_SUB-0000062-136. While Dr. Schonfeld characterizes the July 10, 2004 date as a "publication date," Dr. Schonfeld has not established that the Bose FreeSpace Owner's Guide was publicly available on that date or any date prior to the December 21, 2005 invention date and/or the September 12, 2006 priority date of the '885 Patent. Dr. Schonfeld also has not established that the disclosures in the Bose FreeSpace Owner's Guide were embodied in a system that was publicly available in the United States at a time that would qualify the system as prior art.

764. Dr. Schonfeld also appears to assert that the Bose Freespace product was "publicly available at least as of May 6, 2006." *See* Schonfeld Op. Report at ¶149. However, Dr. Schonfeld did not cite to any evidence supporting this assertion and therefore has not proven that the Bose FreeSpace product was "publicly available" at least as of May 6, 2006. Additionally, I note that May 6, 2006 is after the December 21, 2005 invention date of the '885 Patent and therefore, even if the Bose FreeSpace was "publicly available" as of May 6, 2006, it would not qualify as prior art to the '885 Patent.

765. Relatedly, I also note that one of the Bose FreeSpace documents cited by Dr. Schonfeld has a copyright date of "2006," which is after the December 21, 2005 invention date of the '885 Patent and is not clearly before the September 12, 2006 priority date. *See* BOSE_SUB-0000140-147. Moreover, while some of the Bose FreeSpace materials cited by Dr. Schonfeld appear to be dated prior to the December 21, 2005 invention date and/or the September 12, 2006 priority date of the '885 Patent, Dr. Schonfeld has not proven that any of the materials were actually published in a manner that would qualify them as prior art or that the disclosures therein were embodied in a system that was publicly available in the United States at a time that would qualify the system as prior art.

766. As explained above, there is no disclosure in the Bose Freespace Owner's Guide or any of the other Bose FreeSpace materials cited by Dr. Schonfeld teaching or suggesting that the Bose FreeSpace system is related to or somehow compatible with the Bose Lifestyle 50 System. To the contrary, based on the evidence I have reviewed, it is my opinion that the Bose FreeSpace product and the Bose Lifestyle 50 System are not related or compatible. Moreover, Dr. Schonfeld

1 has not even alleged, let alone explained how or why the Bose FreeSpace product would be
2 combined with the Bose Lifestyle 50 System and/or that such a combination was contemplated or
3 actually made at a date prior to the December 21, 2005 invention date and/or the September 12,
4 2006 priority date of the '885 Patent.

5 767. As another example, in describing the Bose Lifestyle 50 System, Dr. Schonfeld
6 relies on disclosure in a document titled "Understanding Bose link," which relates to the Bose link
7 communication protocol. *See, e.g.*, Schonfeld Op. Report at ¶635 (citing at BOSE_SUB-0000594-
8 601 at 595-597). However, this document is not dated and Dr. Schonfeld has not proven that it
9 was actually published in a manner that would qualify it as prior art or that the disclosures therein
10 were embodied in a system that was publicly available in the United States at a time that would
11 qualify the system as prior art. With respect to the publication of the document, the document
12 itself appears to be an internal Bose document that was not published as it includes a "Company
13 Confidential" designation.

14 768. As explained above, based on the materials I reviewed, it is my opinion that the
15 Bose link communication protocol was not utilized by the Bose Lifestyle 50 System, including the
16 multi-room interface and the Personal media center. Further, Dr. Schonfeld has not explained how
17 or why the Bose Link communication protocol would be combined with the Bose Lifestyle 50
18 System and/or that such a combination was contemplated or actually made at a date prior to the
19 December 21, 2005 invention date and/or the September 12, 2006 priority date of the '885 Patent.

20 769. As another example, in describing the Bose Lifestyle 50 System, Dr. Schonfeld
21 relies on disclosure in three documents related to the Bose Lifestyle SA-2 and SA-3 Stereo
22 Amplifier products. *See, e.g.*, Schonfeld Op. Report at ¶633 (citing BOSE_SUB-0000274-360 at
23 289-290, 292), ¶634 (citing BOSE_SUB-0000361-448 at 384-386), ¶677 (citing BOSE_SUB-
24 0000450-454 at 450-452).

25 770. One of the SA-2 and SA-3 Amplifier documents that Dr. Schonfeld relies upon is
26 dated 2010, which is well after the December 21, 2005 invention date and the September 12, 2006
27 priority date of the '885 Patent. *See* BOSE_SUB-0000274-360. Thus, this document does not
28 qualify as prior art. Another one of the SA-2 and SA-3 Amplifier documents that Dr. Schonfeld

1 relies on is not dated at all and Dr. Schonfeld has not proven that it actually published in a manner
2 that would qualify it as prior art or that the disclosures therein were embodied in a system that was
3 publicly available in the United States at a time that would qualify the system as prior art. *See*
4 BOSE_SUB-0000450-454.

5 771. The third SA-2 and SA-3 Amplifier document relied on by Dr. Schonfeld is titled
6 “The Bose Lifestyle SA-2 and SA-3 Stereo Amplifier Owner’s Guide” (“SA-2 and SA-3 Amplifier
7 Guide”), which is dated 2004. *See* BOSE_SUB-0000361-448. However, Dr. Schonfeld did not
8 establish that the SA-2 and SA-3 Amplifier Guide was publicly available in 2004 or any date prior
9 to the December 21, 2005 invention date and/or the September 12, 2006 priority date of the ’885
10 Patent. Dr. Schonfeld also did not establish that the disclosures in the SA-2 and SA-3 Amplifier
11 Guide were embodied in a system that was publicly available in the United States at a time that
12 would qualify the system as prior art.

13 772. As explained above, unlike the Bose Lifestyle 50 System, the SA-2 and SA-3
14 Amplifier products appear to have Bose link communication protocol capability. *See* BOSE_SUB-
15 0000361-448 at 366. [REDACTED]

16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED] As explained above, based on the evidence I have reviewed, the
21 multi-room interface of the Bose Lifestyle 50 System did not utilize the Bose link communication
22 protocol and therefore is not a “Bose link enabled media center.” Thus, if an SA-2 or SA-3
23 Amplifier product were connected to the multi-room interface of the Bose Lifestyle 50 System,
24 the Bose link communication protocol could not be used. *Id.* ([REDACTED])
25 [REDACTED]
26 [REDACTED]).

27 773. Additionally, Dr. Schonfeld has not alleged, let alone proven that the SA-2 and SA-
28 3 Amplifier products were actually combined with a Bose Lifestyle 50 System at a date prior to

1 the December 21, 2005 invention date and/or the September 12, 2006 priority date of the '885
2 Patent.

3 774. For the reasons above, Dr. Schonfeld has not proven that the actual Bose Lifestyle
4 50 System or the combination of the various Bose products he relies on qualifies as prior art.

5 **2. The Bose Lifestyle 50 System did not have “Zone Scenes” Functionality**

6 775. Claim 1 of the '885 Patent requires a “first zone player” that is programmed with
7 the capability to be added to two different “zone scenes” and then later operate in accordance with
8 a selected one of the two different “zone scenes.”

9 776. As explained above, a “zone scene” requires a group of “zone players” that (i) is
10 “predefined” and “previously-saved” at a user’s request in advance of the group being activated
11 for synchronous playback as part of an initial “setup” phase during which the group members are
12 “added” to the “zone scene” by a user using a “network device” (*i.e.*, a controller device) and (ii)
13 initially exists in an inactive state such that the “zone players” added to the “zone scene” are “to
14 be configured for synchronous [media] playback” at a future time when the group is invoked, but
15 do not change their operating mode for audio playback at the time of creation and can thereafter
16 be used for individual audio playback while the “predefined,” “previously-saved” group remains
17 in existence and is available to be “selected for invocation” in the future. *Supra* Section IX.A.4.

18 777. Based on the evidence I have reviewed regarding the Bose Lifestyle 50 System, it
19 is my opinion that neither the Acoustimass modules of the Bose Lifestyle 50 System nor the SA-
20 2 and SA-3 amplifiers that appear to have been compatible with the Bose Lifestyle 50 System
21 (each of which may be referred to herein as a “Lifestyle player”) had the capability to be added to
22 a “zone scene” – let alone the capability to be added to two different “zone scenes” and then later
23 operate in accordance with a selected one of the two different “zone scenes,” as required by claim
24 1 of the '885 Patent.¹⁸

25 778. As explained above, the evidence I reviewed indicates that the Personal music
26

27 ¹⁸ It is also my opinion that the Jewel Cube speakers of the Bose Lifestyle 50 System did not have the
28 capability to be added to a “zone scene” – let alone the capability to be added to two different “zone scenes”
and then later operate in accordance with a selected one of the two different “zone scenes,” as required by
claim 1 of the '885 Patent. Dr. Schonfeld does not appear to dispute this.

center of the Bose Lifestyle 50 System enabled a user to set up a “shared source” of audio that could be distributed via audio cables from the centralized multi-room interface to Lifestyle players in up to four rooms (rooms A, B, C, and D) so that the same audio could be played back simultaneously via the Lifestyle players and their connected speakers (e.g., the Jewel Cube speakers of the Bose Lifestyle 50 System). BOSE_SUB-0000001-55 at 44-45. Based on the Bose Lifestyle 50 System evidence I reviewed, setting up a “shared source” was the only way to create any sort of “group” of Lifestyle players that were capable of playing back the same audio simultaneously. As an example, to set up a “shared source” in two rooms A and B, a user could (1) use the ROOM button on the Personal music center to select room A and then use a source button to set an audio source for room A; and (2) use the ROOM button on the Personal music center to select room B and then use the same source button to set the same audio source for room B. Thereafter, the user could use the ROOM button again to select both rooms A and B together such that both rooms could be controlled together:

Setting up a shared source

Now, let’s say the system is already on and you want to play the FM radio in rooms A and B:

1. Wake up the Personal music center.
2. Press the ROOM button until the room indicator **A** is displayed. Press the FM source button and adjust the volume to the desired level for room A.
3. Press the ROOM button again to select room **B**. Press the FM source button and adjust the volume to the desired level for room B. Now, the indicators **A B** are displayed.
4. Press the ROOM button again. The indicators **A B** appear on the display indicating that you can control these two rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF, SLEEP) is applied to both rooms.

BOSE_SUB-0000001-55 at 44.

779. Alternatively, a user could set up a “shared source” for all the available rooms A-D by pressing the HOUSE button on the Personal music center followed by pressing a source button to select the audio source that the user wanted to listen to in all rooms:

Using the HOUSE button

Using the HOUSE button, you can link all rooms together and control them as one. When you press the HOUSE button, an empty box indicator is displayed for each connected room. Any button pressed after that (any source button, VOLUME, MUTE, or SLEEP) affects every room. When you are done listening you can press OFF to turn off the entire system.

Note: If you do not press any additional buttons after pressing HOUSE, pressing HOUSE again cancels HOUSE mode.

BOSE_SUB-0000001-55 at 45.¹⁹

780. When a user set up a “shared source” in one of the ways described above, the evidence I have reviewed indicates that, after the user selected the shared audio source, the Personal music center would transmit information to the centralized multi-room interface, which would configure itself to distribute the same audio from the same audio source to each of the rooms so that the same audio could be played back simultaneously via the Lifestyle players. *See, e.g.*, BOSE_SUB-0000001-55 at 6 (“The Bose multi-room interface, with four independent audio outputs that allow you to enjoy Bose sound throughout your home.”), 12 (illustrating a Bose Lifestyle 50 System configuration with a CD player and an Acoustimass module connected the multi-room interface), 17 (illustrating various audio sources connected to multi-room interface via audio input cables), 19 (“When batteries are first installed in the music center; it sets up a radio-frequency link with the closest multi-room interface.”), 44-45 (explaining how to use ROOM and HOUSE buttons of the Personal music center to set up an audio source for one or more rooms connected to the multi-room interface).

781. Further, the evidence I have reviewed indicates that once a “shared source” of audio was set up, a Lifestyle player sharing the audio source could not thereafter be used for individual audio playback until a user used the ROOM button of the Personal music center to select the Lifestyle player and then used a source button to set the audio source for the Lifestyle player to a different audio source such that it no longer shares an audio source with other Lifestyle players. *Id.* at 44 (“Returning to single-room control[:] After you have gained control of multiple rooms

¹⁹ It is worth noting that pressing the HOUSE button itself does not cause, and is not used to configure, all the players to play audio in synchrony. For example, to control multiple players that are each playing different audio, a user could press the HOUSE button followed by pressing the mute button to mute all the players. *See* BOSE_SUB-0000001-55 at 45.

1 using the ROOM button, you can use the ROOM button again to gain control of a single room.
2 Press ROOM until the room you want is displayed (A, B, C, or D). Control that room as
3 desired.”). In this way, a group of Lifestyle players having a “shared source” of audio would have
4 to be destroyed before any one of the Lifestyle players in the group could be used for individual
5 audio playback.

6 782. In my opinion, this “shared source” functionality of the Bose Lifestyle 50 System
7 is distinctly different from the “zone scenes” capability that is described and claimed in the ’885
8 Patent, for several reasons.

9 783. First, a group of Lifestyle players having a “shared source” of audio was not
10 “predefined” and “previously-saved” at a user’s request in advance of the group being activated
11 for synchronous playback as part of an initial “setup” phase during which the group members were
12 “added” to the group by a user using a “network device” (*i.e.*, a controller device), as required by
13 claim 1 of the ’885 Patent. To the contrary, the Bose Lifestyle 50 System evidence I have reviewed
14 makes clear that a group of Lifestyle players having a “shared source” of audio was a temporary,
15 ad-hoc group that was automatically activated at the same time it was created. *See, e.g.*,
16 BOSE_SUB-0000001-55 at 43 (“A shared source is one that is playing in the controlled room as
17 well as in up to three additional rooms”), 44 (“Setting up a shared source[:]
18 Press the ROOM button again. The A B indicators appear on the display indicating that you can control these two
19 rooms together. Any button command given now (SOURCE, VOLUME, MUTE, ON/OFF,
20 SLEEP) is applied to both rooms.”), 45 (“Press the HOUSE button before each command to apply
21 the command to all rooms: Press ... HOUSE then a source [to] [p]lay the selected source in all
22 connected rooms.”).²⁰

23 784. Second, a group of Lifestyle players having a “shared source” of audio did not
24 initially exist in an inactive state such that the Lifestyle players added to the “zone scene” could
25 continue to be used for individual audio playback while the group remained in existence and was
26 available to be “selected for invocation” in the future, as required by claim 1 of the ’885 Patent.

27 ²⁰ Like Squeezebox, the Bose Lifestyle 50 System utilizes temporary, ad-hoc grouping. As such, the Bose
28 Lifestyle 50 System suffers from the same defects with respect to claim 1 of the ’885 Patent as Squeezebox.

1 To the contrary, the Bose Lifestyle 50 System evidence I have reviewed makes clear that a group
2 of Lifestyle players having a “shared source” of audio was automatically activated at the time of
3 creation, and that once a group of Lifestyle players having a “shared source” of audio was created,
4 it was not possible for a user to use any of the Lifestyle players in the group for individual audio
5 playback unless the group was destroyed by changing the audio source for the Lifestyle player that
6 the user wanted to use for individual audio playback. *See, e.g.*, BOSE_SUB-0000001-55 at 44
7 (“Returning to single-room control[:]. After you have gained control of multiple rooms using the
8 ROOM button, you can use the ROOM button again to gain control of a single room. Press ROOM
9 until the room you want is displayed (A, B, C, or D). Control that room as desired.”).

10 785. Third, a group of Lifestyle players having a “shared source” of audio was not a
11 group of “zone players” that are “to be configured for synchronous playback of media” when the
12 group is “invoked” for the additional reason that the invocation of a group of Lifestyle players
13 having a “shared source” of audio – which took place at the same time the group was created – did
14 not involve any change to the configuration of the Lifestyle players as it relates to audio playback.
15 To the contrary, the Bose Lifestyle 50 System evidence I have reviewed indicates that a Lifestyle
16 player in a group of Lifestyle players having a “shared source” of audio would have had the same
17 configuration for audio playback both before and after the group was invoked. *See, e.g.*
18 BOSE_SUB-0000001-55 at 6, 12, 17, 19, 44-45; BOSE_SUB-0000684-687 at 684-685. In fact,
19 based on my review of the Bose Lifestyle 50 System evidence, it appears that a Lifestyle player
20 would not have had any awareness that it had been added to a group of Lifestyle players having a
21 “shared source” of audio that would have prompted the Lifestyle player to change its configuration
22 for audio playback. *Id.* Instead, as noted above, it is the multi-room interface – not Lifestyle
23 players – that would change its configuration in order to distribute the audio from the “shared
24 source” to the Lifestyle players in the group.

25 786. Fourth, even setting aside these fundamental differences between a group of
26 Lifestyle players having a “shared source” of audio and a “zone scene,” a Lifestyle player did not
27 have the capability to be a member of two different groups of Lifestyle players each having a
28 “shared source” that are both in existence at the same time such that they are both available to be

1 “selected for invocation,” which is another requirement of the claimed “zone scenes” capability.
2 To the contrary, the Bose Lifestyle 50 System evidence I have reviewed establishes that a Lifestyle
3 player could only be a member of one group of Lifestyle players having a “shared source” of audio
4 that was in existence at any given time, and that the only way a Lifestyle player in a first group of
5 Lifestyle players having a “shared source” of audio could have been added to a second group of
6 Lifestyle players having a “shared source” of audio was to destroy the first group by changing the
7 audio source for the Lifestyle player to match the “shared source” of audio for the second group.
8 *See, e.g.* BOSE_SUB-0000001-55 at 43-45 (explaining how to use ROOM and HOUSE buttons to
9 set up an audio source for one or more rooms).

10 787. Fifth, the Bose Lifestyle 50 System is the type of “conventional multi-zone audio
11 system” that the ’885 Patent describes as having limitations with regard to grouping and that the
12 “zone scenes” functionality of the ’885 Patent distinguished and improved upon. *See* ’885 Patent
13 at 1:30-2:24; *see also* Case No. 20-6754, D.I. 309 at 3-5, 12.

14 788. I also note that the Bose Lifestyle 50 System evidence I reviewed never uses the
15 term “zone scenes” or otherwise describes any technology that would have enabled a user to (i)
16 first create a group of Lifestyle players that was “predefined” and “previously-saved” in advance
17 of being activated and then (ii) later select that group for “invocation” in order to activate it.

18 789. I further note that the Bose Lifestyle 50 System fails to disclose or suggest any
19 capability for a user to save a group of Lifestyle players having a “shared source” of audio
20 “according to a common theme,” such as by assigning it a name, which fails to meet the
21 requirements of Google's proposed construction of a “zone scene.”

22 790. Thus, for at least these reasons, it is my opinion that the Lifestyle players relied
23 upon by Dr. Schonfeld in his Opening Report did not have the capability to be added to a “zone
24 scene” – let alone the capability to be added to two different “zone scenes” and then later operate
25 in accordance with a selected one of the two different “zone scenes,” as required by claim 1 of the
26 ’885 Patent.

27 791. Despite the foregoing evidence establishing that Lifestyle players did not have
28 “zone scenes” capability, in his Opening Report, Dr. Schonfeld opines the Lifestyle players were

1 capable of being added to a “zone scene” based on a theory that appears to rely on “the addition
2 of multiple rooms and zones ... to the Lifestyle ecosystem” using a Bose link enabled media center
3 and the “Bose Link communication protocol.” *See* Schonfeld Op. Report at ¶¶ 650-653. However,
4 nothing in Dr. Schonfeld’s Opening Report alters my opinion that a group of Lifestyle players
5 having a “shared source” of audio is not a “zone scene” for all of the reasons explained above, and
6 as such, the Lifestyle players did not have the capability to be added to a “zone scene.”

7 792. As an initial matter, Dr. Schonfeld’s opinion that the Bose Lifestyle 50 System
8 discloses a “zone scene” is not based on any functionality of the actual Bose Lifestyle 50 System
9 itself. *See* Schonfeld Op. Report at ¶¶ 650-653. Instead, Dr. Schonfeld relies exclusively on
10 disclosure related to (i) setting up SA-2 and/or SA-3 Amplifiers in “additional rooms” using Bose
11 link technology of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home entertainment system”
12 (*id.* at ¶652 (citing BOSE_SUB-0000274-360 at 297 and BOSE_SUB-0000361-448 at 385-386))
13 – not a Bose Lifestyle 50 System that does not have Bose link capability; and (ii) the Bose link
14 communication protocol (*id.* at ¶653 (citing BOSE_SUB-0000594-601 at 595-596)) – which, as
15 explained above, is not utilized by the Bose Lifestyle 50 System. For these reasons alone, Dr.
16 Schonfeld’s theory is flawed.

17 793. Regardless, what Dr. Schonfeld identifies in these other disclosures that are
18 unrelated to and incompatible with the Bose Lifestyle 50 System does not teach a “zone scene.”

19 794. To start, Dr. Schonfeld does not even attempt to explain how what he points to
20 meets the actual requirements of a “zone scene,” such as the requirement for a group that is
21 “predefined” or “previously saved” in advance of being activated for synchronous playback or the
22 requirement that the group initially exists in an inactive state such that the group members are “to
23 be configured for synchronous [media] playback” at a future time when the group is “invoked.”
24 *See* Schonfeld Op. Report at ¶¶ 650-653. Instead, Dr. Schonfeld’s opinion that these other
25 disclosures teach a “zone scene” appears to be based exclusively on his statement that “Bose
26 LifeStyle allows for the addition of multiple rooms and zones to the be added to the Lifestyle
27 ecosystem,” which is illustrated in the following image that he cites to from the SA-2 and SA-3
28 Amplifier Guide:

Setting Up Additional Rooms For Sound

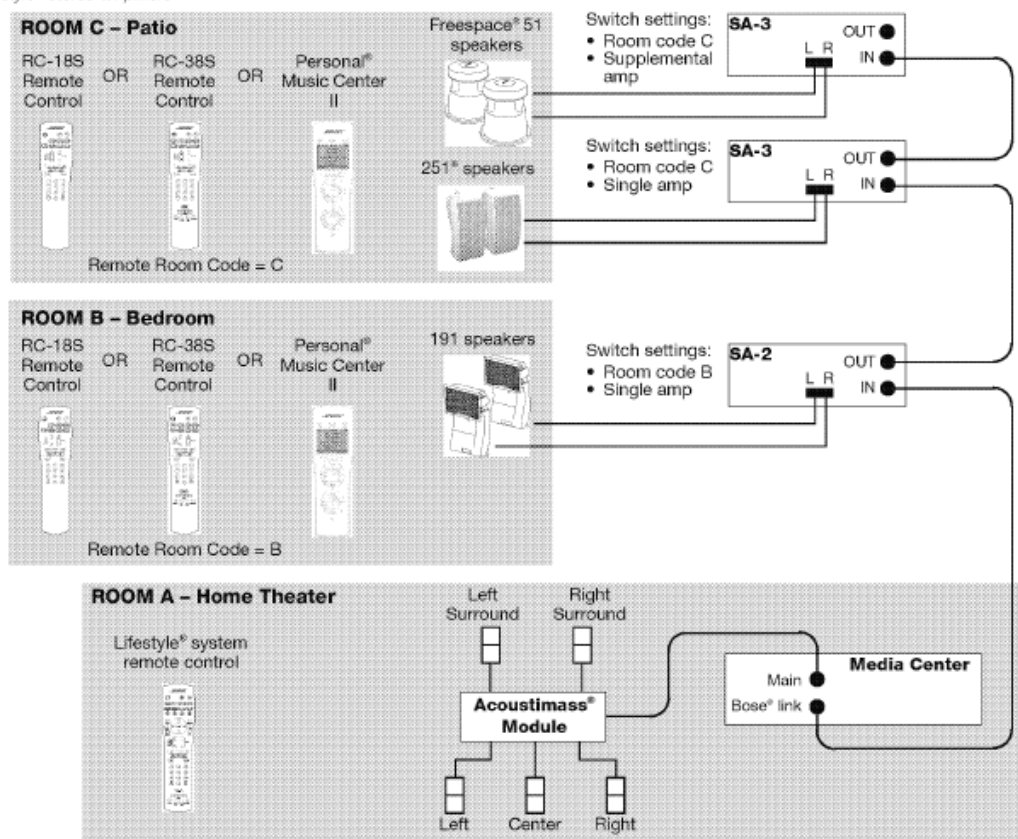
Setup guidelines for additional rooms

If you have a Lifestyle® 18 series II, 28 series II, 38 or 48 home entertainment system, you can experience stereo sound in up to 14 other rooms using Lifestyle® stereo amplifiers, compatible speaker systems and remote controls for the other rooms.

- Remote controls for other rooms must be set to the same house code as the main room remote, but each remote must be set to a different room code. See "Setting up remote controls for other rooms" on page 23.
- The Lifestyle® amplifier and its remote control must be set to the same room code. See "Setting up the amplifier room code" on page 24.
- When using more than one amplifier to power more than two speakers in a room (Figure 18, room C), all amplifiers must be set to the same room code. Also, one amplifier must be set to the single amp mode and all others must be set to the supplemental amp mode. See "Single and supplemental amplifiers" on page 25.

Figure 18

Sample installation of Lifestyle® stereo amplifiers



1 (“[T]he Bose Link communication protocol allows for an indication that additional rooms, for
2 example, have been added to the media center.”).

3 795. Although unclear, in this regard Dr. Schonfeld appears to be asserting that manually
4 hardwiring additional SA-2 or SA-3 amplifiers in additional rooms to a Bose link enabled Lifestyle
5 media center teaches a “zone scene.” *Id.* I disagree. The mere fact that a user can manually
6 hardwire additional SA-2 or SA-3 amplifiers in additional rooms to a Bose link enabled Lifestyle
7 media center does not teach a “zone scene,” which requires a group of “zone players” that (i) is
8 “predefined” and “previously-saved” at a user’s request in advance of the group being activated
9 for synchronous playback as part of an initial “setup” phase during which the group members are
10 “added” to the “zone scene” by a user using a “network device” (*i.e.*, a controller device) and (ii)
11 initially exists in an inactive state such that the “zone players” added to the “zone scene” are “to
12 be configured for synchronous [media] playback” at a future time when the group is invoked, but
13 do not change their operating mode for audio playback at the time of creation and can thereafter
14 be used for individual audio playback while the “predefined,” “previously-saved” group remains
15 in existence and is available to be “selected for invocation” in the future. Dr. Schonfeld’s theory
16 is flawed for numerous reasons.

17 796. First, manually hardwiring SA-2 or SA-3 amplifiers to a Bose link enabled Lifestyle
18 media center does not involve a user adding the SA-2 or SA-3 amplifiers to a “zone scene” using
19 a “network device” whereby the “zone scene” is “predefined” and “previously-saved” at a user’s
20 request, which is a required aspect of a “zone scene.”

21 797. Second, manually hardwiring SA-2 or SA-3 amplifiers to a Bose link enabled
22 Lifestyle media center does not result in a group of SA-2 or SA-3 amplifiers that are “to be
23 configured for synchronous [media] playback” at a future time when the group is invoked, which
24 is another required aspect of a “zone scene.” Instead, the evidence I reviewed indicates that SA-2
25 or SA-3 amplifiers that are hardwired in series to a Bose link connector can play different audio
26 (stream 1 or stream 2) depending on the configuration of their corresponding dedicated remote
27 controls. BOSE_SUB-0000594-601 at 597 ([REDACTED]
28 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]).
4 798. Third, because an SA-2 or SA-3 amplifier can only be selected individually via its
5 own dedicated remote control, it was not possible for a group of multiple SA-2 or SA-3 amplifiers
6 in different rooms to be “selected for invocation,” which is another required aspect of a “zone
7 scene.” As explained above, the evidence I reviewed indicates that each such SA-2 or SA-3
8 amplifier could only be controlled by its own dedicated Bose link enabled remote control that was
9 set to the same room code as the SA-2 or SA-3 amplifier. *See* BOSE_SUB-0000361-448 at 384-
10 386 (“Remote controls for other rooms must be set to the same house code as the main room
11 remote, but each remote must be set to a different room code. ... The Lifestyle® amplifier and its
12 remote control must be set to the same room code.”). Because each dedicated remote control is
13 coded to only a *single* amplifier, there is no remote control that enables the selection of a group of
14 *multiple* amplifiers for invocation. And I have seen no evidence that multiple SA-2 or SA-3
15 amplifiers that are hardwired to a Bose link enabled Lifestyle media center could be controlled
16 together with a single Bose link enabled remote control. Notably, as explained above, based on
17 the evidence I reviewed, the Personal music center of the Bose Lifestyle 50 System was not Bose
18 link enabled and therefore could not be used to control multiple SA-2 or SA-3 amplifiers that are
19 hardwired to a Bose link enabled Lifestyle media center. [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]

24 799. Moreover, as explained above, in order for SA-2 and SA-3 amplifiers that are
25 hardwired to a Bose link enabled Lifestyle media center to be able to playback the same audio
26 simultaneously, the SA-2 and SA-3 amplifiers need to first be set to the same stream of audio
27 (stream 1 or stream 2). *See, e.g.,* BOSE_SUB-0000594-601 at 597. In this regard, the SA-2 and
28 SA-3 amplifiers that are hardwired to a Bose link enabled Lifestyle media center share a “stream”

1 of audio and thus rely upon the same “shared source” form of grouping as the Bose LifeStyle 50
2 System. Thus, for the same reasons that the “shared source” functionality of the Bose Lifestyle 50
3 System fails to teach the “zone scenes” capability that is described and claimed in the ’885 Patent,
4 this Bose link configuration relied on by Dr. Schonfeld also fails to teach the “zone scenes”
5 capability.

6 800. Turning to claim 1’s additional requirement that the “first zone player” be
7 programmed with the capability to be a member of two different “zone scenes” comprising
8 overlapping “predefined” groups that are both in existence at the same time such that they are both
9 available to be “selected for invocation,” Dr. Schonfeld opines that a Lifestyle player for a Bose
10 Lifestyle 50 System would have met this requirement as well, based on the following theory:
11 “[T]he Bose Lifestyle expressly teaches managing two separate streaming sources at one time,
12 such that room A can operate on stream 1, and room B can operate stream 2, for example.”
13 Schonfeld Op. Report at ¶ 656. However, this theory is flawed for a number of reasons.

14 801. First, Dr. Schonfeld’s opinion that the Bose Lifestyle 50 System discloses two
15 different “zone scenes” comprising overlapping “predefined” groups that are both in existence at
16 the same time is not based on any functionality of the actual Bose Lifestyle 50 System itself. *See*
17 Schonfeld Op. Report at ¶¶ 654-656. Instead, Dr. Schonfeld relies exclusively on disclosure related
18 to the Bose link communication protocol (*id.* at ¶ 656 (citing BOSE_SUB-0000594-601 at 597) –
19 which, as explained above, is not utilized by and incompatible with the Bose Lifestyle 50 System.
20 For this reason alone, Dr. Schonfeld’s theory is meritless.

21 802. Second, I fail to see how Dr. Schonfeld’s theory has any relevance to the
22 requirement that the “first zone player” be programmed with the capability to be a member of two
23 different “zone scenes” comprising overlapping “predefined” groups that are both in existence at
24 the same time such that they are both available to be “selected for invocation.” Instead, per Dr.
25 Schonfeld’s own words, his theory is based on the Bose link communication protocol enabling a
26 single room A (not a group of rooms) being able to play audio provided via stream 1 and a single
27 room B (not a group of rooms) being able to play audio provided via stream 2. This has nothing
28 to do with groups of Lifestyle players period, let alone two different “zone scenes” comprising

1 overlapping “predefined” groups that are both in existence at the same time such that they are both
2 available to be “selected for invocation.” Instead, what Dr. Schonfeld describes is just two separate
3 rooms being able to play two separate streams of audio.

4 803. Third, if Dr. Schonfeld is suggesting that the Bose link technology allows a group
5 of Lifestyle players to be defined by the stream of audio (stream 1 or stream 2) that they are
6 configured to play, any given Lifestyle player can only be configured to play a single stream of
7 audio at a given time. Thus, a Lifestyle player could never be a member of two different co-
8 existing groups that are defined by different streams of audio. For example, the only way a
9 Lifestyle player in a first group of Lifestyle players configured for stream 1 could have been added
10 to a second group of Lifestyle players configured for stream 2 would be to destroy the first group
11 by changing the audio stream for the Lifestyle player from stream 1 to stream 2. *See, e.g.*,
12 BOSE_SUB-0000594-601 at 597.

13 804. Thus, nothing in Dr. Schonfeld’s Opening Report alters my opinion that the
14 Lifestyle players in the Bose Lifestyle 50 System did not have the capability to be added to a “zone
15 scene” – let alone the capability to be added to two different “zone scenes” and then later operate
16 in accordance with a selected one of the two different “zone scenes,” as required by claim 1 of the
17 ’885 Patent.

18 **3. The Bose Lifestyle 50 System Did Not Meet Limitation 1.0**

19 805. Limitation 1.0 of claim 1 of the ’885 patent requires a “first zone player.”

20 806. As noted above, Sonos’s proposed construction of “zone player” as that term is
21 used in the ’885 Patent is a “data network device configured to process and output audio.” *Supra*
22 Section IX.A.2. And related to this proposed construction, Sonos’s interpretation of the plain and
23 ordinary meaning of the term “data network” is “a medium that interconnects devices, enabling
24 them to send digital data packets to and receive digital data packets from each other.” *Id.*

25 807. As an initial matter, it is not clear what device in the Bose Lifestyle 50 System Dr.
26 Schonfeld is alleging to be the claimed “first zone player.” *See* Schonfeld Op. Report at ¶¶622-
27 624. Instead, Dr. Schonfeld merely states that the “Bose Lifestyle player corresponds to the
28 claimed Zone Player and it provides the ability to stream music from a controller over a Wi-Fi or

Schonfeld is alleging to be the claimed “first zone player” or what he is alleging to be the claimed “program instructions.” *See* Schonfeld Op. Report at ¶¶642-643. For these reasons alone, Dr. Schonfeld has failed to prove that the Bose Lifestyle 50 System includes a “zone player” with a “program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions”

834. Moreover, to the extent Dr. Schonfeld is arguing that a Jewel Cube speaker is the “first zone player,” there is no evidence teaching or suggesting that a Jewel Cube speaker has “program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions” To the contrary, as explained above, the evidence shows that a Jewel Cube speaker is a passive speaker that is hard-wired to an Acoustimass module of a Bose Lifestyle 50 System and simply outputs audio in the form of sound once an analog signal is received via an audio cable. *See* BOSE_SUB-0000001-55 at 7, 11. Thus, it is my opinion that a Jewel Cube speaker does not have “program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions.”

8. The Bose Lifestyle 50 System Did Not Meet Limitations 1.5 / 1.6

835. Limitations 1.5 and 1.6 of claim 1 of the '885 patent require the “first zone player” to be programmed with the capability for, “while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players,” “receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked.”

836. As an initial matter, Dr. Schonfeld’s opinion that the Bose Lifestyle 50 System meets limitations 1.5 and 1.6 is not based on any functionality of the actual Bose Lifestyle 50 System itself. *See* Schonfeld Op. Report at ¶¶650-653. Instead, Dr. Schonfeld relies exclusively on functionality related to (i) setting up SA-2 and/or SA-3 Amplifiers in “additional rooms” using

1 Bose link technology of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home entertainment
2 system” (*id.* at ¶652 (citing BOSE_SUB-0000274-360 at 297 and BOSE_SUB-0000361-448 at
3 385-386)) – not a Bose Lifestyle 50 System that does not have Bose link capability and (ii) the
4 Bose link communication protocol (*id.* at ¶653 (citing BOSE_SUB-0000594-601 at 595-596)) –
5 which, as explained above, is not utilized by the Bose Lifestyle 50 System. For these reasons
6 alone, Dr. Schonfeld has failed to prove that the actual Bose Lifestyle 50 System discloses
7 limitation 1.6.

8 837. Additionally, it is not clear what Dr. Schonfeld is alleging to be the claimed “first
9 zone player,” “second zone player,” “network device,” “first zone scene,” or “first indication.”
10 *See* Schonfeld Op. Report at ¶¶650-653. Thus, for these reasons alone, Dr. Schonfeld has failed
11 to prove that any system, let alone the actual Bose Lifestyle 50 System, discloses limitation 1.6.

12 838. Regardless, for at least the reasons below, neither the actual Bose Lifestyle 50
13 System nor Dr. Schonfeld’s alleged Bose Lifestyle 50 System discloses limitation 1.6.²¹

14 Actual Bose Lifestyle 50 System

15 839. In my opinion, the actual Bose Lifestyle 50 System does not disclose limitation 1.6
16 for at least the following reasons.

17 840. First, as explained above, the evidence I have reviewed establishes that neither the
18 Acoustimass modules of the Bose Lifestyle 50 System nor the SA-2 and SA-3 amplifiers that
19 appear to have been compatible with the Bose Lifestyle 50 System (each of which may be referred
20 to herein as a “Lifestyle player”) had any capability to be added to a “zone scene” comprising a
21 “predefined grouping of zone players . . . that are to be configured for synchronous playback of
22 media when the . . . zone scene is invoked,” and for this reason alone, a Lifestyle player did not
23 have the capability to “receiv[e], from a network device over a data network, a first indication that
24 the [Lifestyle player] has been added to a first zone scene comprising a first predefined grouping
25 of [Lifestyle players] including at least the [recipient Lifestyle player] and a second [Lifestyle
26

27 ²¹ Note that while I have separately addressed the shortcomings of the actual Bose Lifestyle 50 System and
28 Dr. Schonfeld’s alleged Bose Lifestyle 50 System with respect to limitations 1.5-1.10, it should be
understood that these shortcomings can be considered together depending on how Dr. Schonfeld intends on
combining the various Bose products upon which he relies, which is currently unclear.

1 player] that are to be configured for synchronous playback of media when the first zone scene is
2 invoked.”

3 841. Second, even setting aside the fundamental differences between a group of
4 Lifestyle players having a “shared source” of audio and a “zone scene,” the Bose Lifestyle 50
5 System evidence that I have reviewed establishes that Lifestyle players did not have the capability
6 to “receiv[e], from a network device over a data network, a first indication that the [Lifestyle
7 player] has been added to” a group of Lifestyle players having a “shared source” of audio. Instead,
8 based on the evidence I have reviewed, when a user set up a “shared source” of audio for multiple
9 Lifestyle players using the Personal music center of the Bose Lifestyle 50 System, the Personal
10 music center would transmit information to the centralized multi-room interface (not to the
11 Lifestyle players), which would cause the multi-room interface to configure itself to distribute the
12 same audio from the same audio source to each of the rooms so that the same audio could be played
13 back simultaneously via the Lifestyle players. *See, e.g.* BOSE_SUB-0000001-55 at 6, 12, 17, 19,
14 44-45; BOSE_SUB-0000684-687 at 684-685. In other words, a Lifestyle player would not receive
15 any information from the Personal music center but instead would receive audio from the multi-
16 room interface but audio alone is not an indication that the Lifestyle player has been added to a
17 group of Lifestyle players, let alone a “zone scene.” Moreover, as explained above, a POSITA
18 would not consider the multi-room interface and the Lifestyle players to be operating on a data
19 network because the hard-wired connection therebetween is not a medium that interconnects
20 devices, enabling them to send digital data packets to and receive digital data packets from each
21 other. Thus, even if an indication that the Lifestyle player has been added to such a group was
22 sent from the multi-room interface to a Lifestyle player (which is not the case), such an indication
23 would not be received over a data network, as required by limitation 1.6.

24 Dr. Schonfeld’s alleged Bose Lifestyle 50 System

25 842. In my opinion, Dr. Schonfeld’s alleged Bose Lifestyle 50 System does not disclose
26 limitation 1.6 for at least the following reasons.

27 843. First, as explained above, the evidence I have reviewed establishes that in a Bose
28 link configuration of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home entertainment

1 system,” a Lifestyle player did not have any capability to be added to a “zone scene” comprising
2 a “predefined grouping of zone players . . . that are to be configured for synchronous playback of
3 media when the . . . zone scene is invoked,” and for this reason alone, a Lifestyle player did not
4 have the capability to “receiv[e], from a network device over a data network, a first indication that
5 the [Lifestyle player] has been added to a first zone scene comprising a first predefined grouping
6 of [Lifestyle players] including at least the [recipient Lifestyle player] and a second [Lifestyle
7 player] that are to be configured for synchronous playback of media when the first zone scene is
8 invoked.”

9 844. Second, in a Bose link configuration of a Bose “Lifestyle 18 series II, 28 series II,
10 38 or 48 home entertainment system,” the evidence I have reviewed establishes that a Lifestyle
11 player did not have any capability for “receiving, from a network device over a data network, a
12 first indication that the [Lifestyle player] has been added to” any sort of group of Lifestyle players
13 for synchronous playback, let alone a “first zone scene.”

14 845. Despite the clear absence of this functional capability required by limitation 1.8,
15 Dr. Schonfeld opines that the Bose Lifestyle 50 System discloses this functionality. However,
16 nothing in Dr. Schonfeld’s Opening Report alters my opinion that the Lifestyle players did not
17 have the functional capability required by limitation 1.8.

18 846. For instance, although unclear, at paragraph 653 of his Opening Report, Dr.
19 Schonfeld appears to assert that the “indication” of limitation 1.6 is disclosed by the Bose Link
20 communication protocol based on a theory that “the Bose Link communication protocol allows for
21 an indication that [Lifestyle players in] additional rooms . . . have been added to the media center.”

22 See Schonfeld Op. Report at ¶653. I disagree. [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]
28 [REDACTED]

These disclosures are consistent with Dr.

1 Schonfeld's characterization: "The Bose Link connection is essentially a conversation between the
2 media center and the expansion device. The media center sends on/off, volume and source change
3 commands along with audio to the zones. The zones then respond by sending information back to
4 the media center to let it know that the zone is still active." Schonfeld Op. Report at ¶653.
5 However, none of this information that is allegedly exchanged between a Bose link enabled media
6 center and a Lifestyle player that is a Bose link expansion product amounts to an "indication" that
7 the Lifestyle player has been added to any sort of group for synchronous playback, let alone an
8 "indication" that a Lifestyle player has been added to a "zone scene."

9 847. Moreover, to the extent that Dr. Schonfeld is asserting that the alleged "indication"
10 is sent from the Lifestyle player to the Bose link enabled media center, such a theory would fail
11 for the additional reason that the claim requires the "indication" to be received by the "first zone
12 player." The Bose link enabled media center cannot possibly be the "first zone player" because
13 there is only a single Bose link enabled media center in any given system and thus a Bose link
14 enabled media center could not be added to a "zone scene" with another Bose link enabled media
15 center. *See, e.g.,* BOSE_SUB-0000361-448 at 384 (illustrating SA-2 and SA-3 amplifiers
16 connected to a single Bose link enabled media center).

17 848. I also note that at paragraph 653, Dr. Schonfeld also asserts that "[i]mportantly, ...
18 the media center will not acknowledge commands from any zone that is not targeted or invoked."
19 *See* Schonfeld Op. Report at ¶653. I fail to see how this statement is relevant to limitation 1.6 as
20 it has nothing to do with a Lifestyle player receiving an "indication" that the Lifestyle player has
21 been added to a "zone scene."

22 **9. The Bose Lifestyle 50 System Did Not Meet Limitations 1.5 / 1.7**

23 849. Limitations 1.5 and 1.7 of claim 1 of the '885 patent require the "first zone player"
24 to be programmed with the capability for, "while operating in a standalone mode in which the first
25 zone player is configured to play back media individually in a networked media playback system
26 comprising the first zone player and at least two other zone players," "(ii) receiving, from the
27 network device over the data network, a second indication that the first zone player has been added
28 to a second zone scene comprising a second predefined grouping of zone players including at least

1 the first zone player and a third zone player that are to be configured for synchronous playback of
2 media when the second zone scene is invoked, wherein the second zone player is different than
3 the third zone player.”

4 850. As an initial matter, Dr. Schonfeld’s opinion that the Bose Lifestyle 50 System
5 meets limitations 1.5 and 1.7 is not based on any functionality of the actual Bose Lifestyle 50
6 System itself. *See* Schonfeld Op. Report at ¶¶654-656. Instead, after incorporating his discussion
7 of limitation 1.6 (which also is not based on any functionality of the actual Bose Lifestyle 50
8 System itself, as explained above), Dr. Schonfeld relies exclusively on functionality related to the
9 Bose link communication protocol, which, as explained above, is not utilized by the Bose Lifestyle
10 50 System. *Id.* at ¶656 (citing BOSE_SUB-0000594-601 at 597). For these reasons alone, Dr.
11 Schonfeld has failed to prove that the actual Bose Lifestyle 50 System discloses limitation 1.7.

12 851. Additionally, it is not clear what Dr. Schonfeld is alleging to be the claimed “first
13 zone player,” “second zone player,” “third zone player,” “network device,” “first zone scene,”
14 “second zone scene,” or “second indication.” *See* Schonfeld Op. Report at ¶¶650-656. Thus, for
15 these reasons alone, Dr. Schonfeld has failed to prove that any system, let alone the actual Bose
16 Lifestyle 50 System, discloses limitation 1.7.

17 852. Regardless, for at least the reasons below, neither the actual Bose Lifestyle 50
18 System nor Dr. Schonfeld’s alleged Bose Lifestyle 50 System discloses limitation 1.7.

19 Actual Bose Lifestyle 50 System

20 853. In my opinion, the actual Bose Lifestyle 50 System does not disclose limitation 1.7
21 for at least the following reasons.

22 854. First, as I explained above, the evidence I have reviewed establishes that neither the
23 Acoustimass modules of the Bose Lifestyle 50 System nor the SA-2 and SA-3 amplifiers that
24 appear to have been compatible with the Bose Lifestyle 50 System (each of which may be referred
25 to herein as a “Lifestyle player”) had any capability to be added to a “zone scene” comprising a
26 “predefined grouping of zone players . . . that are to be configured for synchronous playback of
27 media when the . . . zone scene is invoked,” and for this reason alone, a Lifestyle player did not
28 have the capability to “receiv[e], from the network device over the data network, a second

1 indication that the [Lifestyle player] has been added to a second zone scene comprising a second
2 predefined grouping of [Lifestyle players] including at least the [recipient Lifestyle player] and a
3 third [Lifestyle player] that are to be configured for synchronous playback of media when the
4 second zone scene is invoked,” where the second Lifestyle player included in the “first zone scene”
5 is different from the third Lifestyle player included in this “second zone scene.”

6 855. Second, a Lifestyle player did not have the capability to receive a “second
7 indication that [it] has been added to a second zone scene comprising a second predefined grouping
8 of [Lifestyle players]” while remaining a member of a “first zone scene comprising a first
9 predefined grouping of [Lifestyle players]” that is still in existence such that both the “first zone
10 scene” and the “second zone scene” are thereafter both available to be “selected for invocation,”
11 which is required by limitations 1.5 / 1.7 when viewed in combination with the other surrounding
12 claim language and serves as an additional reason why a Lifestyle player did not meet limitations
13 1.5 / 1.7 of the '885 Patent. Indeed, even setting aside the fundamental differences between a
14 group of Lifestyle players having a “shared source” of audio and a “zone scene,” a Lifestyle player
15 could not have been a member of multiple different groups of Lifestyle players each having a
16 “shared source” of audio that are both in existence at the same time and available to be “selected
17 for invocation.” To the contrary, as explained above, the Bose Lifestyle 50 System evidence I
18 have reviewed establishes that a Lifestyle player could only be a member of one group of Lifestyle
19 players having a “shared source” of audio that was in existence at any given time, and that the only
20 way a Lifestyle player in a first group of Lifestyle players having a “shared source” of audio could
21 have been added to a second group of Lifestyle players having a “shared source” of audio was to
22 destroy the first group by changing the audio source for the Lifestyle player to match the “shared
23 source” of audio for the second group. *See, e.g.,* BOSE_SUB-0000001-55 at 43-45 (explaining
24 how to use ROOM and HOUSE buttons to set up an audio source for one or more rooms).

25 856. Third, even setting aside the fundamental differences between a group of Lifestyle
26 players having a “shared source” of audio and a “zone scene” and the inability of a Lifestyle player
27 to be a member of multiple different groups of Lifestyle players each having a “shared source” of
28 audio that are both in existence at the same time and available to be “selected for invocation,” the

1 Bose Lifestyle 50 System evidence that I have reviewed establishes that Lifestyle players did not
2 have the capability to “receiv[e], from the network device over the data network, a second
3 indication that the [Lifestyle player] has been added to” a group of Lifestyle players having a
4 “shared source” of audio. The reasoning is the same as that explained above with respect to
5 “receiving” the “first indication” of limitation 1.6.

6 Dr. Schonfeld’s alleged Bose Lifestyle 50 System

7 857. In my opinion, Dr. Schonfeld’s alleged Bose Lifestyle 50 System does not disclose
8 limitation 1.7 for at least the following reasons.

9 858. First, as explained above, the evidence I have reviewed establishes that in a Bose
10 link configuration of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home entertainment
11 system,” a Lifestyle player did not have any capability to be added to a “zone scene” comprising
12 a “predefined grouping of zone players . . . that are to be configured for synchronous playback of
13 media when the . . . zone scene is invoked,” and for this reason alone, a Lifestyle player did not
14 have the capability to “receiv[e], from the network device over the data network, a second
15 indication that the [Lifestyle player] has been added to a second zone scene comprising a second
16 predefined grouping of [Lifestyle players] including at least the [recipient Lifestyle player] and a
17 third [Lifestyle player] that are to be configured for synchronous playback of media when the
18 second zone scene is invoked,” where the second Lifestyle player included in the “first zone scene”
19 is different from the third Lifestyle player included in this “second zone scene.”

20 859. Second, the evidence I have reviewed establishes that in a Bose link configuration
21 of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home entertainment system,” a Lifestyle
22 player did not have the capability to receive a “second indication that [it] has been added to a
23 second zone scene comprising a second predefined grouping of [Lifestyle players]” while
24 remaining a member of a “first zone scene comprising a first predefined grouping of [Lifestyle
25 players]” that is still in existence such that both the “first zone scene” and the “second zone scene”
26 are thereafter both available to be “selected for invocation,” which is required by limitations 1.5 /
27 1.7 when viewed in combination with the other surrounding claim language and serves as an
28 additional reason why a Lifestyle player did not meet limitations 1.5 / 1.7 of the ’885 Patent.

1 860. Third, in a Bose link configuration of a Bose “Lifestyle 18 series II, 28 series II, 38
2 or 48 home entertainment system,” the evidence I have reviewed establishes that a Lifestyle player
3 did not have any capability for “receiving, from the network device over the data network, a second
4 indication that the [Lifestyle player] has been added to” any sort of group of Lifestyle players for
5 synchronous playback, let alone a “second zone scene.” The reasoning is the same as that
6 explained above with respect to “receiving” the “first indication” of limitation 1.6.

7 **10. The Bose Lifestyle 50 System Did Not Meet Limitation 1.8**

8 861. Limitation 1.8 of claim 1 of the ’885 patent requires a “first zone player” that is
9 programmed with the capability for “after receiving the first and second indications, continuing to
10 operate in the standalone mode until a given one of the first and second zone scenes has been
11 selected for invocation.”

12 862. As an initial matter, Dr. Schonfeld’s opinion regarding limitation 1.8 relies in part
13 on functionality that is not related to the actual Bose Lifestyle 50 System itself. Specifically, Dr.
14 Schonfeld relies on functionality related to setting up SA-2 and/or SA-3 Amplifiers in “additional
15 rooms” using Bose link technology of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home
16 entertainment system” – not a Bose Lifestyle 50 System that does not have Bose link capability.
17 *See* Schonfeld Op. Report at ¶676 (citing BOSE_SUB-0000361-448 at 384-385). For this reason
18 alone, Dr. Schonfeld has failed to prove that the actual Bose Lifestyle 50 System discloses
19 limitation 1.8.

20 863. Additionally, while Dr. Schonfeld’s opinion regarding limitation 1.8 relies on
21 “zone scenes” that are allegedly created by setting up SA-2 and/or SA-3 Amplifiers in “additional
22 rooms” using Bose link technology of a Bose “Lifestyle 18 series II, 28 series II, 38 or 48 home
23 entertainment system” (*id.* at ¶676 (citing BOSE_SUB-0000361-448 at 384-385), Dr. Schonfeld
24 relies on the Personal music center of the Bose Lifestyle 50 System to allegedly invoke such “zone
25 scenes” and states that “[a]t that time ... the Bose Link communication protocol is used to
26 communicate with the newly added zone to bring it ‘online’” (*id.* at ¶679). However, as explained
27 above, the Personal Music Center of the Bose Lifestyle 50 System does not utilize the Bose link
28 communication protocol and cannot be used to control SA-2 and/or SA-3 Amplifiers that are set

1 my opening report.

2 1086. I have also reviewed Sonos's Technology Tutorial that provides an overview of the
3 '885 Patent, which I understand was submitted to the court in February 2022. I incorporate by
4 reference herein Sonos's Technology Tutorial and expressly reserve the right to use the
5 Technology Tutorial in whole or in part as a demonstrative to assist in my testimony.

6 **XVIII. RESERVATION OF RIGHT**

7 1087. I reserve the right to further expound on my opinions regarding the validity of claim
8 1 of the '885 Patent in subsequent declarations, reports, and/or at trial.

9
10
11 Dated: July 27, 2022


By: _____
Kevin C. Almeroth